

AUGUST 1915 15 CENTS

MOTOR BOATING

BABY SPEED DEMON



THE GOLD CUP RACERS
IN THIS ISSUE



36 Foot ELCO Express

The Perfect Type of the High Speed Launch

The ELCO Express has achieved the greatest success of any launch ever produced—and with good reason.

It is a type brought up to today's automobile standards of simplicity, power, reliability and beauty. It "serves you on the water as the automobile does on land."

There is grace and speed in every line of these Expresses—there is a comfort in their ample ac-

commodations which appeal to an owner's very heart—there is the certain performance of their new model Elco Engine which marks all Elco Boats.

The Cruisette is a 32-footer that sleeps 6 in comfort—the greatest little boat man ever designed.

30 foot Elco Express
36 foot Elco Express
32 foot Elco Cruisette
38 foot Elco Cruiser
45 foot Elco Cruiser

Full information about ELCO Standardized Models on request. Write for a copy of "Marine Views."

Main Office and Works

The ELCO COMPANY, 201 Avenue A, Bayonne, N. J.

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"Alice"
50 H.P.
STANDARD

Owners
The East & West Ferry and
Transportation Co.,
New Haven.

BARGAINS

are made of results, what you get; not simply what you give.

First cost is not the deciding element.

THE STANDARD ENGINE

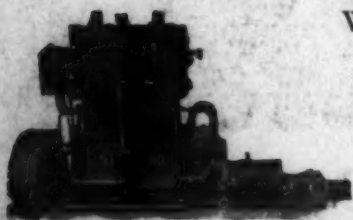
represents that economical condition of highly developed quality which makes every STANDARD engine a bargain.

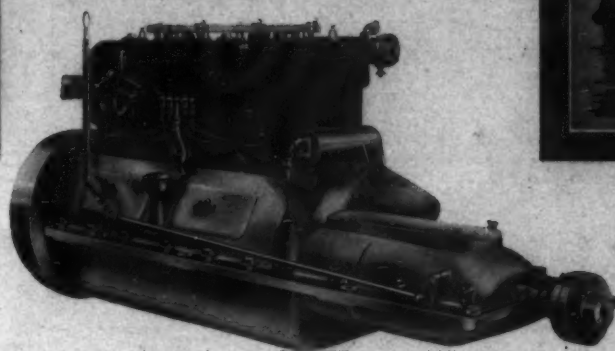
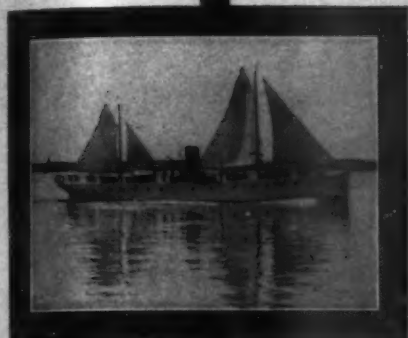
Ever-increasing demands for this engine because of the public's ever-increasing appreciation of its qualities tax our factory's capacity for deliveries.

We urge your prompt ordering now.

Back of the STANDARD Guarantee is the

Standard Motor Construction Company
178 Whiton Street, Jersey City, N. J.





For Any Boat

NO matter whether your boat is a work boat, speed boat, yacht, launch or cruiser, there is a Buffalo engine which will give it a maximum of power at a minimum cost for fuel and upkeep.

And, best of all, a Buffalo is always reliable.

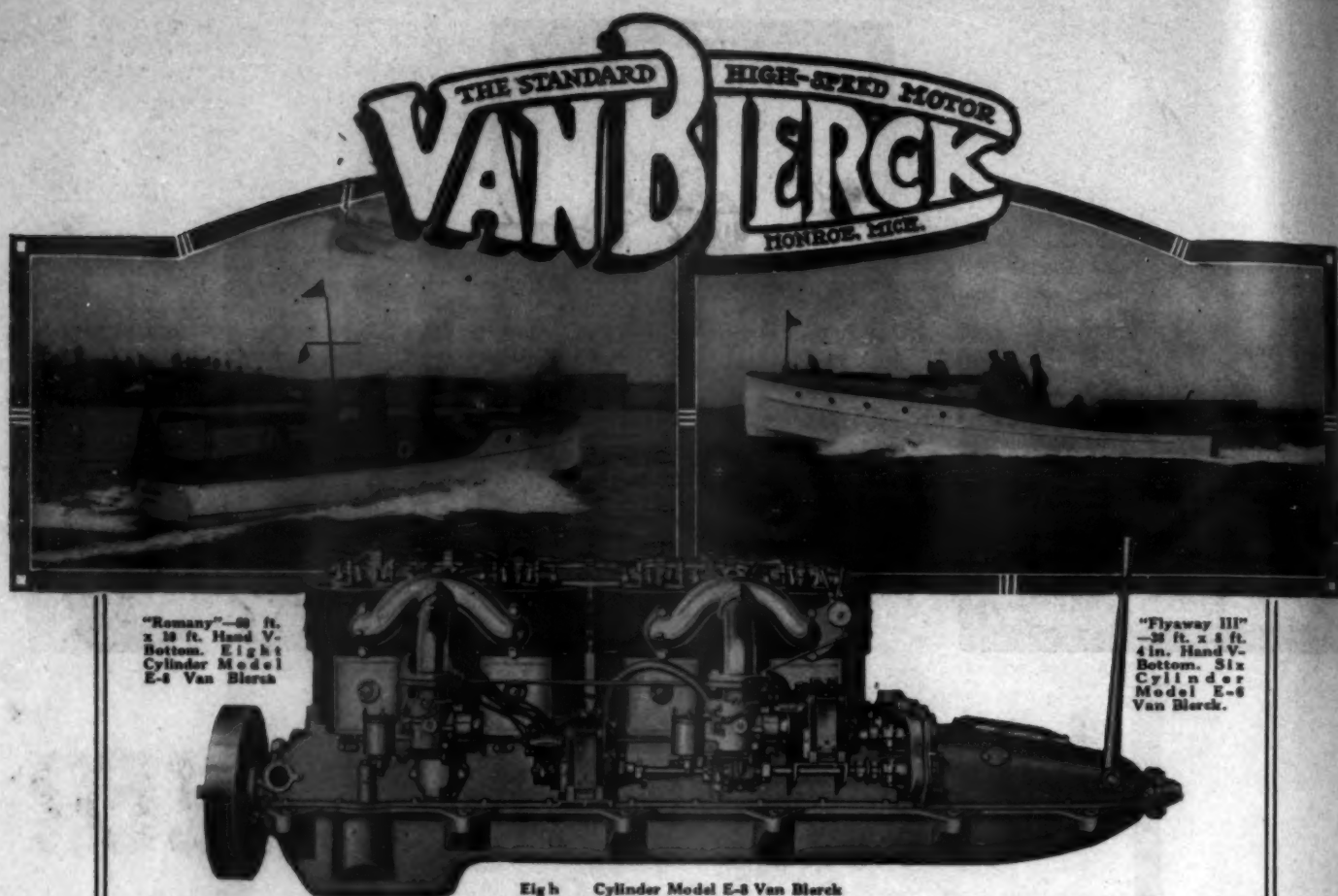
“Buffalo”

The Engine of Constant Service

Buffalos are built in all sizes from 3 to 150 h.p.—high speed, medium speed and slow speed.
Shall we send you the New Buffalo Book?

BUFFALO GASOLINE MOTOR CO.
1274-1286 NIAGARA STREET BUFFALO, N. Y.





A PROVEN SUCCESS

Flyaway III's 1915 Record to Date

	DISTANCE	TIME
New York to Albany and Return Race	270 Miles	12 Hrs. 34 Min. 37 Sec.
Block Island Race	116 Miles	5 Hrs. 40 Min. 20 Sec.
Cornfield Light and Return Race	210 Miles	10 Hrs. 21 Min. 21 Sec.
Stratford Shoal Race	129 Miles	5 Hrs. 56 Min. 45 Sec.

As the season advances the 1915 model Van Blerck stands out, head and shoulders above everything else, as the most uniformly consistent performer and breaker of records.

The truly wonderful performances of "Flyaway III" in the various long distance races, the remarkable speed and reliability of such boats as "Romany," "Raccoon," "Watch Your Step," "Wakonda" and others, and the sincere enthusiasm of Van Blerck owners, all tend to build up a splendid reputation for the new Van Blercks.

The Van Blerck plant has been working day and night, full force, all summer. A large addition has recently been made to our already efficient factory building and orders booked to date will keep the enlarged factory working night and day until October 31st. This is the logical outcome of building a "better motor."

No. of Cyl.	Rated H.P.	Rated R.P.M.	Net Price
MODEL "E"			
Four	65-85	1000-1400	\$1025.00
Six	100-130	1000-1400	1500.00
Eight	135-170	1000-1400	1850.00
MODEL "E-SPECIAL"			
Four	100-110	1400-1700	\$1157.50
Six	145-165	1400-1700	1650.00
Eight	200-230	1400-1700	2145.00
MODEL "EE"			
Four	40-55	850-1000	\$975.00
Six	60-85	850-1000	1275.00
Eight	80-115	850-1000	1500.00
ALL MODELS:—Bore 5½", Stroke 6", T-Head Type.			

Van Blerck Bulletins are issued every month.
May we add your name to the mailing list?

VAN BLERCK MOTOR CO.

— MONROE, MICHIGAN —



THE LOEW-VICTOR AND THE "WHITAKER WHIZZER"

A Combination Hard to Beat

¶ Loew-Victor Engines are the power plants of the 999 one-design class, designed and built under the personal supervision of M. M. Whitaker for members of the Motor Boat Club of America.

¶ Write for details of these remarkable little speed boats, and for our catalogue descriptive of our complete line. We build engines in all sizes, from a little 6 H.P. fisherman's rig to a big 8-cylinder double valve Harbeck Model high speed cruiser engine developing 300 H.P.

¶ Loew-Victor Engines are specified and used by Whitaker, Bowes & Mower, W. H. Hand, Jr., Gielow & Orr, Lawley and most of the prominent architects and builders, not only because Loew-Victor Engines are good engines, but also because they are built by a company which has established a reputation for fair dealing and stands behind its product absolutely.

LOEW-VICTOR ENGINES

2259 Oakdale Ave., Chicago, U. S. A.

The New Caille



Aristocrat

**Four Cycle
Four Cylinder**

**14 Horse Power
Electrically Started**

**Rear Dash Control
Electric Lights**

When you turn on the electric lights in your home, you never wonder if you are going to get light—neither do you worry as to how long that light will burn. You have absolute confidence in the power plant that generates the current.

When the owner of the Caille Aristocrat presses the button, he never doubts that his motor will start—and when it starts, he never wonders how long it will run. He forgets his motor entirely except as he may be reminded by the faint sound of its smooth, even purr.

He is thrilled with that feeling of mastery—the knowledge that that inanimate mass of steel stands ever ready and eager to do his bidding. He feels that his Caille Aristocrat is really a part of himself, for the instant he presses the button or moves a lever his motor moves promptly in exact accordance with his wishes.

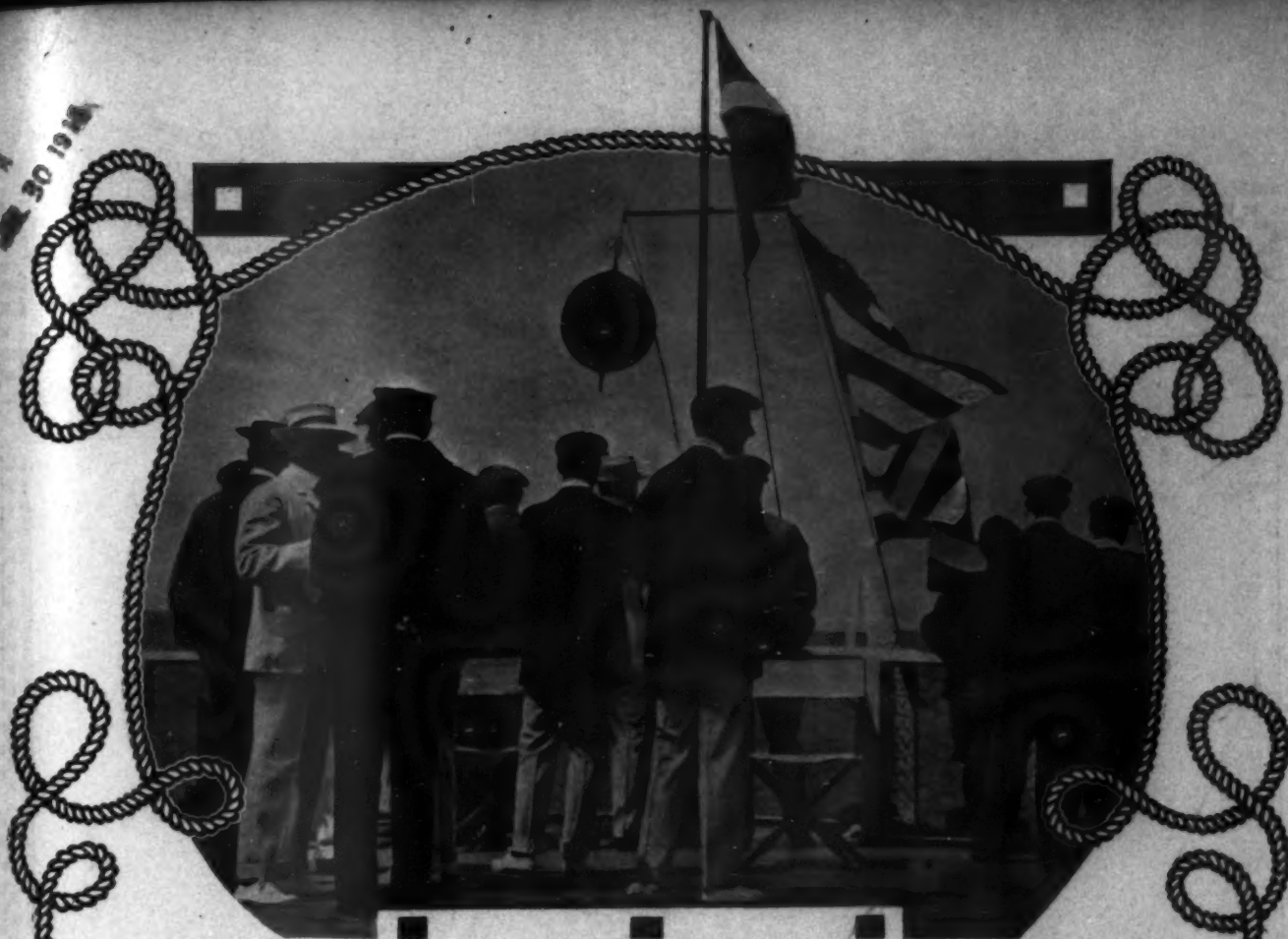
And he also possesses a rare feeling of pride. For he knows that his boat is powered with a motor representing positively the last word in marine engine design and construction—a motor embodying nothing but the best from tip to tip.

The Caille Aristocrat is not a motor for the man who likes to tinker. For it requires no tinkering. Simply give it oil and fuel and then forget that your boat has a motor. It makes motor boating far more exhilarating and you'll enjoy it with greater zest than you ever dreamed was possible.

Special Literature No. 17 on Request.

THE CAILLE PERFECTION MOTOR CO., 1540 Caille St., Detroit, Mich.

AUG 30 1915



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August, 1915

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*There's a lullaby note in each swishing wave
And a joy that no monarch can feel,
As the motor hums like a faithful slave
And my hand grasps the steering wheel;
There's a call from the stars and a call from the sea,
And they bid me come forth and play;
I am served by Delight as I cruise through the night
And a moonbeam points the way.*

AUGUST

1915

THE NATIONAL MAGAZINE OF MOTOR BOATING

MOTOR BOATING

Standard, winner of the first Gold Cup Races, held off the Columbia Yacht Club, New York City, June, 1904. This boat, which was a 60-footer, powered with 100 h. p. motor, won her races at a speed of 23.6 miles per hour. Baby Speed Demon II, the winner last year, is a 20-footer, with 200 h. p., and a speed of 50.5 miles per hour.

Racing for the Gold Cup.

The Racers Which Competed in the Past Compared with Those of Today.

Events Soon to be Held at Which All Speed Records May Fall.

MIDWAY between Stepping Stones and Execution Lights, bearing southeast from the course down Long Island Sound after you have squared away around Throggs Neck, is a most remarkable body of water which in days of the wind-jammer was known by all as Cow Bay, but in this more modern and progressive period of motor-driven craft we will find it designated on the chart as Manhasset Bay. History tells us that in the past sailing vessels of the deepest draft were accustomed to seek shelter in Cow Bay, and that no pilot or chart was necessary to make the entrance. Absolute safety from treacherous winds from any quarter was assured, and the freedom from rocks, shoals or sand-bars made this bay noted throughout the whole sailing world.

Today most of the wind-jammers have disappeared, although occasionally one will be seen beating its way into Manhasset Bay, but those that come no more are not missed, for the motor boat and motor yacht have taken their place and have multiplied a thousand fold.

All those motorboatmen who live within many miles of New York City are familiar with Cow Bay, and those who are more distant should know it better. If there is such a place on earth as the motor boatman's paradise, then Manhasset Bay is the spot. Everything is there which the motor boatman could desire. The safest of safe anchorages for the smallest tender or the largest motor yacht—supplies, clubs, and, in fact, everything.

It is on this body of water that the greatest series of motor boat races which have ever been held are scheduled for the four days of August 14, 16, 17 and 18, starting each day at 4 P. M. These races are for the classic Gold Cup of the American Power Boat Association, which has already been raced for thirteen times. As we go to press, a field of ten or more of the world's fastest hydroplanes seems probable. Scratch races, therefore the first

boat to finish, wins—craft driven by amateur crews—will make the events interesting to spectators to such an extent as the east has never before seen.

Three heats, one on each of the afternoons named above, will be required to decide the final winner, and these will be followed on the next day by the one-mile trials for the Championship of North America.

An invitation has been extended to the motor boating public to be present, and it would be a waste of time to try to estimate the number of boats which will be at anchor for the first race. Coming as it does on Saturday, when New York is enjoying a half-holiday, it is safe to assume the first race will be second in importance to none, not even the International races, which formerly were held at Huntington Bay.

The races will be managed by the new Long Island Sound Section of the American Power Boat Association, assisting the Motor Boat Club of America, the present holders of the trophy.

Since 1904, when the Gold Cup was first offered by the A. P. B. A., it has been raced for each year without a break.

Being inaugurated at practically the time the internal combustion motor came into prominence as the motive power for speed craft, if we can call those of that date speed craft, we find in analyzing the events from 1904 to date a most wonderful history of progress and development.

Form a mental picture of Standard, the winner of the first races for the Cup, in 1904, passing a turning buoy, and then picture Baby Speed Demon II or any other of this year's contenders racing Standard, and you gain a pretty fair idea of how different a meaning the word speedboat has come to have in the last eleven years. For if Standard were to appear on the Manhasset course and make her best record of 25 miles an hour the other boats would have as great a superiority of speed over her as she in her

The Gold Cup of the American Power Boat Association.





Vingt-ét-
Un, winner of the
second race, held
in 1904, at a speed
of 25.7 M. P. H.

Miss Detroit, challenger from the
Miss Detroit Power Boat Asso-
ciation, which hopes
to take the trophy
away from the salt
water.



palniest days had
over the impressive
buoy. Yet C. C.
Riotte's Standard
was considered
something of a won-
der in her day, and took
the motor boating world
almost as much by storm
as would a present-day hydro with well-founded sixty-mile pretensions.

The first race for the perpetual Gold Challenge Cup offered by the A. P. B. A. was held on the Hudson in the latter part of June, 1904, with only three boats out of an entry list of nine rounding up to the starting line on the first day. C. H. Tangeman's Fiat I, substituting for Fiat III, which could not make ready in time, was disabled early in the race, and at no time was there any doubt that Standard, powered with a six-cylinder Standard motor, would wrest the laurels from Water Lily, in spite of the latter's rather liberal time allowance. The races on the two succeeding days were fought out between Standard and Water Lily alone, and resulted in the possession of the cup being vested with the Columbia Yacht Club for the ensuing year.

However, the condition of the deed of gift, stipulating that the winning club shall hold the cup for one year, was waived by the Columbia Club, Harry A. Lozier challenging with his Shooting Star for a renewal of hostilities in September of the same year. It was fated that neither the winner of the first race nor the challenger of the second should win in this event, for along came Vingt-ét-Un II, designed by Clinton H. Crane, and on the strength of a second and two firsts carried the trophy up to the northern waters of New York state, where it was to remain for several years. Speedway, the defending boat for the Columbia Yacht Club, owned by Charles L. Seabury, won second on points, and Mercedes VI, the

Only winner
in 1905, speed
15.9 M. P. H.

Chip II,
winner of the
1906 and 1907
races, at speeds
of 24.5 and 24.9
M. P. H.
respectively.

Disa
winner in 1908
and 1909, at
17.1 M. P. H.

Club, owned by Charles L. Seabury, won second on points, and Mercedes VI, the

property of W. K. Vanderbilt, Jr., of which everything had been expected, came off second best in an encounter with a rock in Hell Gate, after having romped home at the head of the field in the first race, and after that was unable to show her true form. The winner's speed for this race was 25.3 miles per hour, as against Standard's June record of 23.6, and people confidently looked forward to the remarkable speed of 30 miles per hour for 1905.

But they were doomed to disappointment, for although the successor of Shooting Star, H. A. Lozier, Jr.'s Shooting Star II did make a time record closely approaching this speed, first honors went to Chip, a 27-footer with a 10 1/4 h. p. Leighton two-cycle motor, loafing along at less than 16 miles per hour and winning on time allowance. It had been thought that Vingt-et-Un II, which brought the cup to the trophy closet of the Chippewa Yacht Club, would defend it, but in those days this event was run on a handicap basis, where low rating was much more resultful than high speed, and the choice of J. Wainwright's Chip was well justified.

Although classing as the premier event of the year, the race of 1905 could hardly be characterized as more than a dreary failure. There was quantity in the entry list, but very little quality, and the winner's time began to bring home to motor boatdom that to make the annual fixture a success it must be run boat against boat without any conditions. Yet it was not until three years later that the deed of gift was changed and the race was made a free-for-all, with the 40-foot limit the only restriction.

Hawkeye, one of the challengers this year. This boat is powered with a twelve-cylinder 300 h. p. Van Blerck motor, and will be driven by Secretary Judson, of the A. P. B. A.

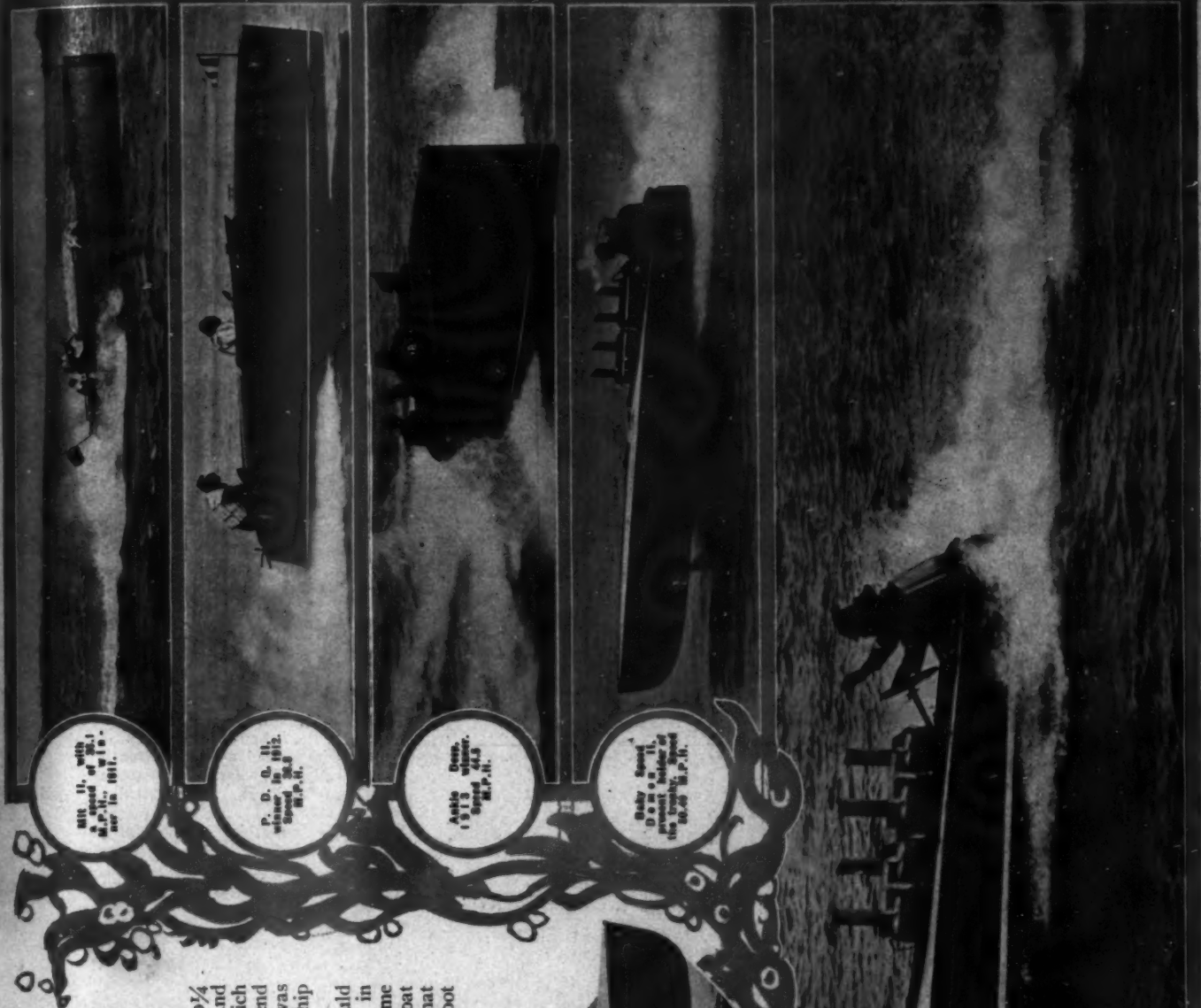
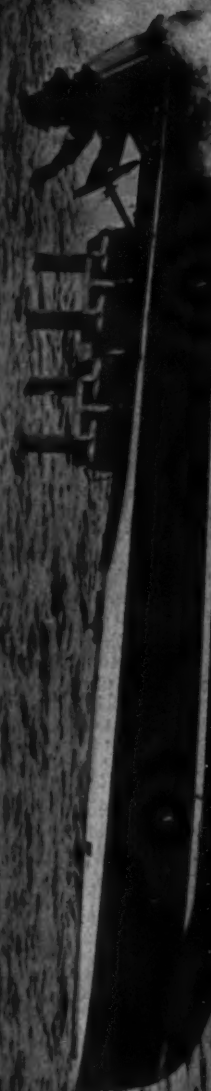
Hawkeye, one of the challengers this year. This boat is powered with a twelve-cylinder 300 h. p. Van Blerck motor, and will be driven by Secretary Judson, of the A. P. B. A.

Star II, with a record of 25.3 miles per hour in 1901.

P. D. II, winner of 1912. Speed 25.3 M.P.H.

Achie Dec. 1913. Speed 25.3 M.P.H.

Star II, with a record of 25.3 miles per hour in 1901.





Tech Jr., the only mono-plane among this year's challengers.

Buffalo Enquirer, one of the challengers from Buffalo.

Matters were certainly not bettered in the 4th race, held in August, 1906, for the framers of the A. P. B. A. racing rules had seen fit to leave out the factor of stroke in figuring rating, and Chip II, the defender and winner for that year was built as a rule beater, pure and simple. With a two-cylinder two-cycle motor of the same make as was installed in the first Chip, she had a bore of four inches and a stroke of ten, giving her a rating of 56.24 as against E. J. Schroeder's Dixie's 99.96. Dixie, therefore, although showing a speed which was prophetic of what the later Dixies would do here and abroad, was not in the running, and the three days' races narrowed down to whether Chip II's time allowance would win out over the slightly superior speed of Sparrow, owned by P. J. Swain, and entered by the Rjverton Yacht Club. It did, by one point, and the Chippewa Yacht Club put the Gold Cup back on the shelf for another year.

The fifth races, held on two days in the middle of August, 1907, were the last under the original rules, and Chip II made the most of them, successfully defending the trophy against four contenders. However short on speed, the first two members of the Chip family were certainly long on reliability, both in the matter of steady running and in the more important item of bringing home the cups. With others of the contenders dropping out along the course or unable to start, Chip II in her two defenses of the cup ploughed along with a maximum variation of not more than a mile an hour and lent new point to the fable of the tortoise and the hare. In 1907 Chip II's rating was seven points higher than in the preceding year, but still the lowest in the field, and such fast boats as Stranger, owned by F. G. Bourne, and C. N. Peacock's Pirate did not have a look-in.

For the fourth and last time the contestants raced over the 30-mile course in Chippewa Bay in 1908, and in this, the first year of the free-for-all races, Dixie II showed her heels to every other boat and won the cup for the Thousand Islands Yacht Club. These races, the sixth, were really epoch-making, for

Table Giving Full Particulars of All Contestants for the A. P. B. A. Gold Cup Since 1904, Their Best Time for an Entire Race, Power, Speed, Etc.

BOAT	OWNER	ENGINE	H.P.	Best Time	Best M.P.H.
First Race—Columbia Yacht Club, June, 1904—Course, 32 Nautical Miles.					
Standard	C. C. Hottel	Standard	1.33.30	25.6	
Water Lily	Frank Seaman		1.54.38	19.3	
Flat I	C. H. Tangeman	F. I. A. T.	.....	.....	.....
Second Race—Columbia Yacht Club, Sept., 1904—Course, 32 Nautical Miles.					
(See Note.)					
Vingt-et-Un II	W. Sharpe Kilmer	Simplex	75	1.37.03	25.3
Speedway	C. L. Seabury	Speedway	64	1.32.13	25.9
Mercedes U.S.A.	H. L. Burdett	Mercedes	66	1.34.43	25.3
Flit	C. D. Holmes	Holmes	36	1.47.36	17.5
Marcelus II	W. K. Allison		34	2.24.05	13.0
Mercedes VI	W. K. Vanderbilt, Jr.	Mercedes	40	1.21.30	26.1
Macaroni	C. H. Tangeman	F. I. A. T.	40	1.27.31	21.6
Shooting Star	H. A. Lenzler, Jr.	Lenzler	24	1.46.19	18.3
Josephine	H. A. Buschmann		19	2.30.25	12.4
Challenger	Smith & Mainley	S. & M.	119	.....	.....
Third Race—Chippewa Bay Yacht Club, 1905—Course, 30 Statute Miles.					
Chip II*	J. Wainwright	Leighton	104	1.52.36	15.9
Invincible	F. H. Wesson	Giant		1.56.13	15.9
Shooting Star II	H. A. Lenzler, Jr.	Lenzler		1.14.58	24.3
T. S. R.	A. L. Richardson	Hiete		1.22.58	21.7
Shooter	E. J. Schroeder	Speedway		1.18.53	23.6
Flit	W. H. Beebe	Darracq		1.35.13	18.9
So Long	George Hasbrouck	Special		1.59.51	22.6
Basium	A. R. Peacock			.....	.....
Panhard II	A. Massena	Panhard		.....	.....
Fourth Race—Chippewa Bay Yacht Club, 1906—Course, 30 Statute Miles.					
Chip II*	J. Wainwright	Leighton		1.57.01	20.6
Sparrow	P. J. Swain	Packard		1.31.21	23.1
Jewel	E. S. Burke	Trebert		1.29.07	24.2
Quinn Again	H. M. Denny	Watertown		1.26.07	18.7
Vingt-Trois	J. F. Gillespie	Trebert		1.28.54	20.7
Tornado	R. W. Kooner	Sterling		.....	.....
Dixie	E. J. Schroeder	S. & M.		1.04.49	27.8
Vingt-et-Un II	W. Sharpe Kilmer	S. & M.		1.17.24	22.2
Panhard II	A. Massena	Panhard		.....	.....
Eureka	J. G. Reid	Fairbanks		.....	.....
Ho Long II	George Hasbrouck	Trebert		1.10.40	22.4
Triton	A. T. Brown	Brown		Disqd.	.....
Fifth Race—Chippewa Bay Yacht Club, 1907—Course, 30 Statute Miles.					
Chip II*	J. Wainwright	Leighton	15	1.26.43	28.8
Delawanna	C. E. Irwin	Fairbanks	21	1.21.43	22.0
Vingt-Trois	J. F. Gillespie	Fairbanks	21	2.04.17	14.5
Stranger	F. G. Bourne	Simplex	77	1.04.56	27.4
Pirate	C. N. Peacock	Trebert	133	1.08.34	26.4
Sixth Race—Chippewa Bay Yacht Club, 1908—Course, 30 Statute Miles.					
Dixie II	E. J. Schroeder	Crane	230	0.58.13	20.9
Chip III	Senator Hawkins	Leighton		0.58.19	20.8
Pirate	C. N. Peacock	Leighton		1.06.17	27.1
Jan	George Hasbrouck	2 Haynes	96	1.06.04	27.2
Stranger	F. G. Bourne	Fairbanks		1.08.22	26.3
Faraway	J. F. Gillespie	Simplex		1.10.10	25.6
U. S. A.	J. S. Sheppard			.....	.....
Duquesne	Howland Peacock			.....	.....
Seventh Race—Thousand Islands Yacht Club, 1909—Course, 32 Statute Miles.					
Dixie II	E. J. Schroeder	Crane	230	0.58.25	20.9
Duquesne	Howland Peacock	Jenick	290	1.07.55	28.5
Stranger	F. G. Bourne	2 Haynes	96	1.10.05	27.4
Jan	George Hasbrouck	2 Haynes	96	1.12.49	26.5
Eighth Race—Thousand Islands Yacht Club, 1910—Course, 32 Statute Miles.					
Dixie III	F. K. Burnham	Crane	250	0.57.14	23.4
Squaw	F. G. Bourne	Simplex	150	0.57.38	23.4
Salt		Leighton	130	1.15.45	25.4
Shipper		Jenick	250	.....	.....
Ninth Race—Frontenac Yacht Club, 1911—Course, 28 Nautical Miles.					
Mit II	J. H. Hayden	Sterling	160	0.53.31	26.1
Shipper	H. B. Quarrier			0.56.05	24.4
Wasp	W. Toussy			0.53.17	26.2
Dixie IV	F. K. Burnham	2 Crane	450	0.51.45	27.3
Hornet	C. L. Toussy			.....	.....
Tenth Race—Thousand Islands Yacht Club, 1912—Course, 32 Statute Miles.					
P.D.Q. II	Alfred G. Miles	Sterling	30	0.53.12	26.8
Baby Reliance	J. H. Blackton	Sterling	150	0.51.55	27.0
Quinn Not	H. F. Denny	2 Watertown	100	0.56.17	24.1
Wasp	W. Toussy	3 Leighton	300	0.54.30	25.3
Mit II	J. H. Hayden	Sterling	160	1.02.25	20.8
Syracuse	W. Toussy	2 Leighton	300	1.06.47	28.6
Bear Cat	H. Coppel	Sterling	90	.....	.....
Ankle Deep	Count Mankowski	2 Sterling	200	.....	.....
Eleventh Race—Thousand Islands Yacht Club, 1913—Course, 28 Nautical Miles.					
Ankle Deep	Count Mankowski	2 Sterling	200	0.44.59	44.5
Mit, Jr.	Dr. J. J. Harty	Sterling	75	0.55.02	27.1
P.D.Q. III	Alfred G. Miles	Sterling	150	0.48.44	41.1
Little John	H. S. Ford	Sterling	150	0.49.24	40.5
Mit III	J. H. Hayden	Sterling	160	0.49.49	40.3
Sand Burr III	A. K. White	Kennison	115	.....	.....
Twelfth Race—Lake George Regatta Assn., 1914—Course, 30 Nautical Miles.					
Baby Speed Demon II	Paula Blackton	Sterling	180	0.41.05	56.49
Baby Reliance V	J. H. Blackton	Sterling	180	0.42.00	54.41
Buffalo Enquirer	W. J. Connors	Sterling	180	0.42.55	48.1
Ankle Deep	Count Mankowski	2 Sterling	300	0.43.53	47.0
P.D.Q. V	Alfred G. Miles	Van Blerck	200	0.44.27	46.4
P.D.Q. IV	Dr. J. J. Harty	Sterling	180	0.45.51	43.2
Tech, Jr.	Coleman du Pont	Sterling	180	0.50.10	41.1
Hawk Eye	Lake George Rynd	Van Blerck	200	0.44.37	46.4
Peter Pan VI	James Simpson	Van Blerck	180	.....	.....
Harpoon	W. H. Young	Van Blerck	180	.....	.....

*Winner on corrected time.
NOTE: The course on the first day of the second race was only 37 1/2 nautical miles, and all the contestants with the exception of Vingt-et-Un II made their best time on this course.
A List of the Probable Starters in the 1915 Races Will Be Found on Page 25.

Little Joker III, with two 200 h. p. Sterling motors.

not only was the time of the winner more than 30 miles per hour—the hitherto unattainable speed—but the winning boat was actually the fastest motor craft in the world—a boat that had won the Harmsworth Trophy and was credited with a trial speed of over 36 miles per hour. Chip III, the "pipe-organ" Chip, the third and most bizarre of this line, built by the estate of the deceased J. Wainwright, made a valiant effort, but Dixie II played with her, winning the first heat by nineteen seconds, the second by six, and stopping for two and a half minutes in the third event, only to loaf home an easy winner with a lead of thirty-three seconds. This spectacular stoppage of Dixie II's motors, and the subsequent spurt to overtake and pass Chip III intensified the zest which had been present in modified form in the other two heats and contributed in making the fifth races the most successful of them all up to that time.

The performance of Dixie II at Huntington and at Chippewa had made her a popular idol, and no one—except perhaps the owners of rival boats—was surprised to see her walk away with the cup the following year and retain possession of it for the Thousand Islands Yacht Club. In fact, she had things so much her own way that the race was thought a dull one, although she painted a high light in it by setting up a new record of 32.87 miles per hour in one of the events. The Hon. "Fingy" Connors, present owner of Buffalo Enquirer, entered for this year's races at Manhasset, was expected to make his debut in the Gold Cup races in 1909 with the boat Courier, but his racer, which it was thought would give Dixie II a finish fight, never showed up, and Mr. Connors's entry into the premier event was postponed until last year.

By 1910 the Dixie family had changed hands, F. K. Burnham becoming the owner of the new Dixie III. This transfer must have saddened the hearts of the members of the Thousand Islands club, for it meant also the transference of the Gold Cup to the Frontenac Yacht Club, the redoubtable Dixie III winning from three other fast boats. She set up a new record of 33.6 for
(Continued on page 39)

Speed Keynote of Chicago Meet.

A Great Series of Races for the William Wrigley, Jr., Trophy and Other Valuable Prizes Planned.
Fastest Hydroplanes of the Country to Get Together on Lake Michigan.

By John G. De Long.

CHICAGO'S speedboat leaders, prevented by the outbreak of the European war from holding the contests planned for 1914, are to renew their activities in the racing game. The revival is set for August 28, 30 and 31, when a series of races is to be held for the \$20,000 William Wrigley, Jr., trophy.

As originally planned, a full week of racing was to have been put on and the contests were to have been features of a water carnival, somewhat similar to the event held off Chicago in 1912 and 1913. But officials of the Associated Yacht & Power Boat Clubs of America, promoters of the annual carnivals, suddenly switched their plans, and, instead of running events for all classes, decided to devote all their energies toward a single event—the Wrigley Trophy series.

The fact that William Hale Thompson is Mayor of Chicago had much to do with the abandonment of the original plans. Mr. Thompson has held the position of commodore of the Associated Yacht & Power Boat Clubs of America ever since the organization was formed three years ago, and up to the time of his election as the city's chief executive had been one of the most active men in western motor boating circles. But the work connected with the arbitration of Chicago's recent street car strike, added to his many other executive

duties, is taking so much of the Mayor's attention that he finds little time left to devote to his favorite sport and can hardly be depended upon to carry his share of the burdens attendant upon the promotion of a week's water carnival.

It is the consensus that the change in plans will add to rather than detract from the regatta and that competition for the one big trophy will appeal to the speedboat owners more than the proposition to race in a number of classes would. So far fourteen owners of fast boats have signified their intention to compete.

Chairman Sheldon Clark, of the regatta committee, has on file eleven entries of representative eastern and western boats. The early nominations include Disturber IV, the international challenger taken to England last summer by James A. Pugh for the Harmsworth Trophy races, which was prevented from competing by the declaration of war; the new Disturber V now being built by Mr. Pugh especially for the Wrigley Trophy race; Earl Deakin's 250 h.p. 26-footer, Hydro Bullet; the 250 h.p. 20-footer Barnacle and W. T. Warren's 150 h.p. 20-footer Billiken. All of the foregoing boats are owned in Chicago. Other western entries include Johnson Brothers' Black Demon, of Terre Haute, and the new 250 h.p. craft recently completed by Smith,



The \$20,000 Wrigley Trophy to be awarded to the winner of the Chicago races.

of Algonac, Mich., for Carl G. Fisher, of Indianapolis.

The eastern entries announced by Chairman Clark include James Simpson's new Peter Pan, Commodore Harry Ford's Little Joker III, Commodore du Pont's Tech Jr., Commodore J. Stuart Blackton's two new boats and Count Mankowski's Ankle Deep Too. The entries of W. J. Connor's Buffalo Enquirer and Buffalo Courier, in addition to other nominations, also are expected.

The race for the Wrigley Trophy will be thrown open to boats of forty feet and under and the distance will be thirty miles, the contest probably to be run around the water cribs off Chicago. In addition to possession of the trophy for one year, the owner of the winning boat is to receive a \$1,000 pure gold nugget, which may be retained in its original form or melted up and converted into cash, as the winner chooses. He also will get a \$500 replica of the trophy. To the second boat will go \$500, to the third \$250 and to the fourth \$100, all of the prizes to be in the form of solid gold nuggets. The races will be the best two out of three.

In his two Disturbers Mr. Pugh will have a formidable pair. Disturber IV, present holder of the Wrigley Trophy, has been completely overhauled and its horsepower increased from 1,800 to close to 2,000 and Mr. Pugh confidently expects to get over sixty miles an hour out of the boat. Some of the experts expect Disturber IV to average nearly that much for the entire thirty miles of the race. Disturber V, which is nearly

(Continued on page 50.)



Upper view shows Disturber IV, Commodore James Pugh's big racer which will defend the Wrigley Trophy, now held by her owner. To the right is "Big Bill" Thompson, Chicago's motor boat mayor, who will lay aside his executive duties long enough to see that the carnival is run off properly. In the circle we have Commodore Jim Pugh at the wheel of Disturber IV. The Commodore will also enter a new 20-foot Disturber.



Valley Racing High Class.

Eighth Annual Regatta of Mississippi Valley Power Boat Association at Hannibal.
The Beginning of a New Policy Which Should Bring Together All Interests.

By Charles F. Chapman.

O the Mississippi Valley Power Boat Association should go the credit of taking a great step forward toward uniting the motor boat racing interests of the country. This association, long noted for its most successful regattas and class racing has in the past always been a firm advocate of cash prizes, believing that no successful racing could result without this incentive. The organizations on the Atlantic and Pacific Coast have for some time taken an almost diametrically opposite view of the cash prize proposition, believing that except in certain rare instances the offering of cash prizes was detrimental to the game and therefore have been working for the entire elimination of any money prizes.

Generally speaking, the owners of the faster racing boats of this country have been in favor of the doing away with cash prizes and many have come out openly and stated so. Probably this condition came to the attention of the officials of the Mississippi Valley Association, for at their annual regatta held at Hannibal, Mo., on July 5, 6 and 7, three classes were arranged in which only trophies were offered to the winners and these classes were the most successful of the whole meet both as regards numbers of starters, speed and competition. Taking the first heat as a basis of comparison, we find a total of fifteen starters in the three trophy races as against an equal number of total starters in the four cash prize races. The speeds made in each of the three trophy races were better than in the cash prize events. This should prove almost beyond question that it is not the offering of cash prizes which has made the Valley regattas so successful in the past, but it must be just the desire to beat the other fellow no matter whether it be for a tin cup or a blue ribbon.

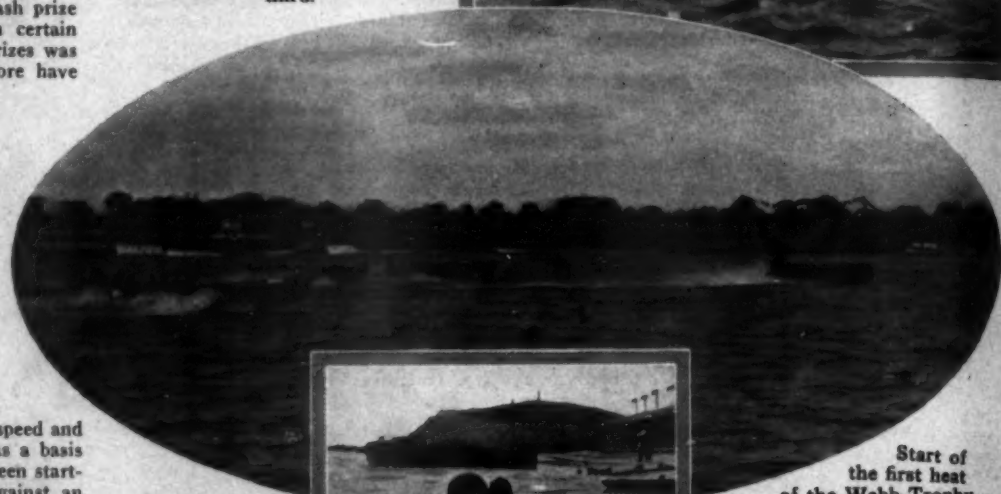
At the close of the Hannibal regatta, the as-

The two Doctors, Dixon and Smith, also known as Admiral Dixon and Vice-Admiral Smith.



sociation officials announced their desire to get together with the other racing interests throughout the country to see if there cannot be some equitable and fair settlement of the prize situation, and suggested an annual conference of these interests to map out uniform racing and classification rules and adopt non-conflicting

Dr. Strong driving his P. D. Q. IV. This boat with a four-cylinder Johnson motor won two firsts, two seconds and a third.



dates for the big regattas. Such a conference, if properly handled, would be very beneficial to all interests and would establish a standard of racing



Start of the first heat of the Webb Trophy race, Barnacle leading, followed by Dodger, Buffalo Enquirer and Buffalo Courier IV.

est new men in the racing game—especially young men. The Valley's class racing has done more to excite interest in this line than anything we know of, yet something more than this is necessary. Looking down this year's list of entrants we are surprised to note the lack of new names. True, we are pleased to see the old ones which have annually appeared for the last few years, but even some of those which have appeared at the last two or more annual regattas were missing altogether this year.

It costs much money to race motor boats nowadays, much more in fact than many who would like to own even small racing craft can afford. The cash which is offered as a prize, may, perhaps, go a long ways toward defraying some of the expenses of the lucky winner, but what about the poor fellows who do not win? They are oftentimes much more deserving and in need of the cash than the man who can afford to spend the money to provide a winning outfit, but cares little about the



Launching Buffalo Courier IV, just previous to the first heat of the Webb Trophy race.

which has been and always will be lacking with several separate and individual racing units.

What the Mississippi Valley Power Boat Association needs, and this is true of almost every other racing organization in the world, is something to inter-

Harry Groat and his four-cylinder Stutz Wisconsin motor in Baby Wisconsin.



Ugly Duckling IV, owned by Harry Godley, having two six-cylinder Pierce-Budd motors connected in tandem.

prize. Instead of having only one or two boats in a race which do not figure in the prizes, which is the condition we find today, we should have an entry list in every event so large and the competition should be so keen that a large majority of the boats will not be among the first two to finish. It is the losers who should be kept interested and enthused, for the winners will take care of themselves. But this cannot be done with the present system of

Dodger IV, a consistent runner, but hardly fast enough considering her company.

awarding cash prizes—something should go to everyone, win or lose, depending upon what he has to offer in the way of speed, with additional incentives in the way of trophies to the winners.

If a boat claims to be a 30-miler and is "there with the goods," so to speak, and shows this speed in a certain number of laps or heats, her owner should be awarded a certain amount of expense money irrespective of whether he finished first or eighth in his class, but should he claim 30 miles and only shows 20 in a race he should receive a correspondingly less amount than had he shown his full 30 miles. Similarly a 40-miler should get a larger sum, a boat which shows 50 miles in a race should receive more than a 40-miler, and so on. A sliding scale could be worked out after a little study taking account of all local conditions.

Such an arrangement would work both ways, that is, for the good of the racing man and spectator as well. The towns or other parties which put up the cash for this expense money to take the place of the cash prizes would be required to expend only for value received. If only a few slow boats showed up at the meet the appropriation would be so much the smaller. We would then not have a repetition of the several fizzes we have recently seen where a 50- or 55-miler was entered in a certain event, but which developed only 30 or thereabouts in the race, taking the first prize valued at several thousand dollars which could have



Two views of the grandstand, one showing the main entrance.



The committee, judges and timers.

Standing, from left to right, Harold W. Schmeltz, Admiral Edward H. Van Patten, Ex-Admiral Charles F. Hanley, Vice-Admiral F. C. Smith, Starter Dixon, Miss Ethel Salisbury, Mrs. W. V. Kidder, Miss Backstrider, Sitting, Secretary W. V. Kidder, George H. Bristol, of Chicago (with straw hat), and Charles F. Chapman of Motor Boat Club, New York, next to the right.

been won by some fourth or fifth rater. The public paid their good money, believing they were to see speeds of nearly a mile a minute, but were cheated out of it as the drivers could win just as much money by running slowly as though they had opened their motors up to the limit. The boats in the smaller classes made better speed, but had to be content with only one-sixth as much prize money.

These western regattas, such as the one recently staged by the Mississippi Valley Power Boat Association, are very different affairs from those which we easterners are accustomed to see. For enthusiasm among spectators; contestants and club members they have no parallel. At Hannibal, Mo., a small

Buffalo Enquirer, just starting up.

city on the Mississippi River, some one hundred odd miles above St. Louis, where this eighth annual regatta was held, at least twenty-five thousand people viewed the events during the three days of July 5-7. Twice a day three thousand spectators crowded into the covered grandstand opposite the starting mark with as many more on the outside. For miles around, the rural inhabitants flocked into town and had their first view of a fast speeding hydroplane, and there was not much about their design or construction which escaped their vision.

Members of clubs belonging to the association for hundreds of miles up and down the river cruised to Hannibal, many of them in open boats or in craft which the salt water man would look at twice before venturing many yards from shore in.

From Kansas City, several hundred miles up the dirty Missouri River, full of shifting sand bars and drift, came Judge Guinotte, the veteran of many regattas, in his open boat, Scotia, powered with a three-cylinder Ferro motor. With him was Howard Ingraham, in more ways than one the hero of the regatta. When anything had to be done it was Howard Ingraham who did it and he was working from early morning to late at night for others, to make the races a success. Some one in the

(Continued on page 50)



Finish of the 20-mile free-for-all race, Buffalo Enquirer leading a length ahead of Buffalo Courier IV.

Breaking A World's Record

By One of the Crew.
Photographs by Alfred F. Loomis.

THE betting was ten to one that we would not finish. Considering the 270-mile run ahead of us, a large part of which was



An advantage of the open speedboat is that when you get tired of sitting down you can stand up, while the pleasant alternative to standing up is sitting down. Eastern Star, with a 60 h.p. Loew-Victor, which made a record second only to Flyaway's.

The Albany Yacht Club, where Flyaway III and others of the racers stopped to take on gas.

in the yachting magazines which published any authentic data about this hull or her power plant were carefully preserved for future reference, and before the first flurries of snow had fallen last autumn reports reached us from many quarters that the slide rule artists had been busy and that Flyaway's enviable record of 1914 would look sick compared with what they prophesied would happen in 1915. "A new design to beat Flyaway" seems to have been the slogan of the past winter, and around the fireside at many clubs we have heard her merits and demerits discussed over and over again and have listened to many arguments from many would-be designers as to how they not only planned to, but actually were improving upon Flyaway.

Then came a rumor last fall of proposed changes in the handicapping rules, planned specifically to prevent a repetition of Flyaway's winning on corrected time, as she did in every race in which she started in 1914. It was then whispered about that should the changes be adopted, Flyaway would be down and out and would not have a ghost of a show under the horsepower rating rule which would take into consideration the revolutions of the motor. This, of course, pleased not a few of the racing men.

The delegates assembled at the annual meeting to hear and vote on these proposed changes which they had heard were suggested to legislate Flyaway out of the running, but much to their surprise it was the owner of Flyaway himself who proposed these changes which were adopted, and he spoke most heartily and enthusiastically for their adoption. Well can we remember his words, how he said, "Gentlemen, the rating and handicapping rules as they exist today are obsolete; they give an unfair advantage to many boats, particularly my own, which the records show, cannot help winning by hours and hours on corrected time against any boat yet built. This is very bad for the sport in general, not to mention the fact that it is no fun or credit to win races this way. The rules need changing and bringing up to date, and you can count on me to support any changes which this meeting suggests."

If the racing game had more men like Thomas B. Taylor connected with it, how much better would it be for all of us. A sportsman and gentleman to the core is this man, always arguing for a clean and honest

ous mud flats of the upper Hudson, perhaps the odds were not out of proportion to the chances we were taking, driving a 38-foot cruiser with a 100 horsepower motor wide open to the limit, yet we succeeded in covering the distance in 12 hours and 34 seconds, which is over 10 hours faster than any cruiser has ever made it in, and without a doubt a world's record. Furthermore, our record was more than 2 hours faster than any boat of any description, steam or motor power, racer or hydroplane, has ever made this particular course in.

We were well aware of what we were up against, and even before we entered Flyaway III for this seventh annual race of the New York Motor Boat Club from New York to Albany and return we had made the solemn pledge that it was "Albany or Bust."

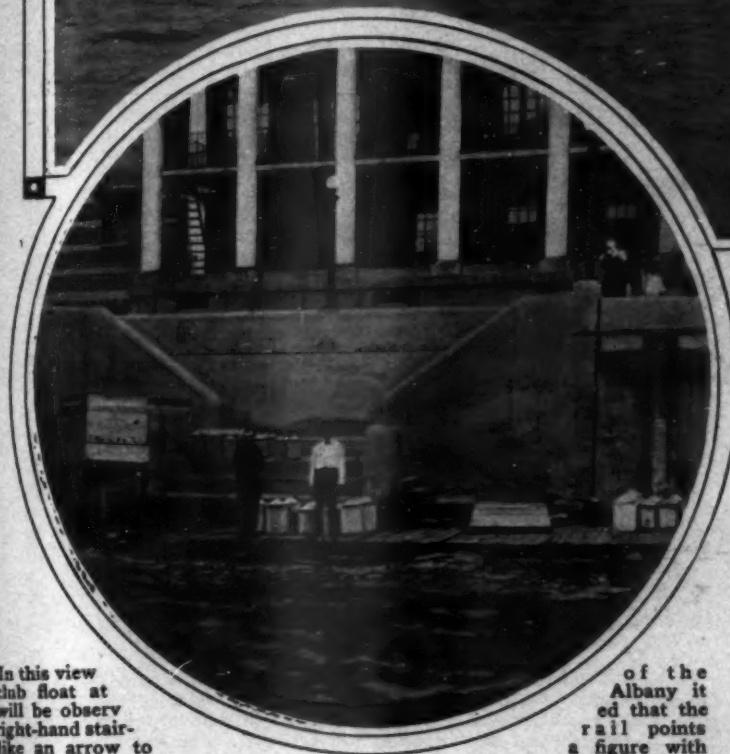
We were not so much afraid of the course or the mud flats, for some of us had sailed in every annual Albany race since the first one seven years ago and had learned from experience where all the high spots were located, but we all realized that Flyaway III was now a year old and had made such a record for herself in 1914 under the ownership of "Tommy" Taylor that the eyes of the world had been upon her for well nigh fifty-two weeks and that all her characteristics had been studied and studied by the wise ones. Every time she had been hauled out of the water for a change of propeller or a little grooming there were sure to be several experts on the scene with note-book and rule, and in one or two instances her actual lines were picked off. The pages

Retta D, slow but sure—sure, in fact, of winning any handicap cruiser race she enters. Her extremely low rating and her steady-going two-cylinder Ralaco played their part in adding the cup for her class to the collection of her owner, Charles Dalton.

through waters generally thick with floating drift, and as much of the route must be navigated at night, among and between the numer-



Poor Flyaway III! She made the 270 statute miles in 12 hours, 34 minutes and 37 seconds, which is only 2 hours, 12 minutes and 13 seconds faster than any other boat has ever done it in. Her 100 h.p. six-cylinder Van Blerck motor evidently works just as well for Flyaway's new owner, F. L. Upjohn, as it did for "Tommy" Taylor.



In this view club float at will be observ right-hand stair-like an arrow to a megaphone. The marked is Johnny

York Motor Boat Club,

will attest that when it comes to hard work like putting on gas, Johnny is a considerable artist with the voice-magnifier.

of the Albany it ed that the rail points a figure with individual thus

Sohns, of the New whose many friends

sport and may the best boat win. He has freely given of his knowledge and what he learned about Flyaway III in 1914 to many who built boats for this year, and much of his advice and many of his suggestions have been heeded to great advantage.

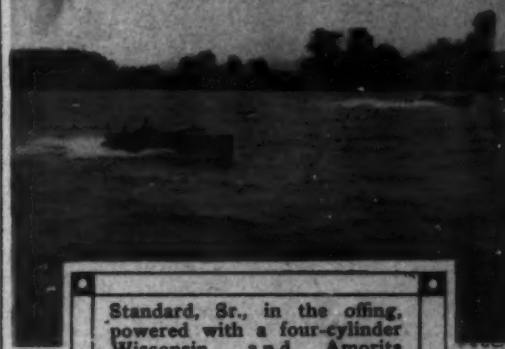
The Albany race being the first long distance race of this season, we surmised that the numerous fast craft which had been building during the winter would be after Flyaway's scalp in this race, and upon looking over the entry list we found that three new high-speed cruisers were entered against her. We at once knew that it was going to be a real race, and that to win we must bend all our energies. There were several other cruisers besides these high-speed ones entered in our class, but they had chosen to elect the possibility of winning on time allowance and were therefore at the other end of the class, that is, small powered and comparatively slow-going boats. Our main wish was to establish a new record for a cruiser run from the coast to the capital and return, and therefore we did not consider very seriously our chances of winning the race on corrected time as well.

The cruiser record between these two cities has been very materially reduced since the first race in 1909. The famous Elmo II won the time prize the first year, taking 30 hours and 50 minutes to cover the course. The best cruiser record since was established in 1914, when Fabius took 23 hours and 4 minutes and Thistle came in less than a minute later. Besides these records, the speed boats had been competing against themselves, and while a 270-mile grind in an open craft is no child's play, yet they had reduced their record to 18 hours and 44 minutes—a very remarkable performance; so one will see that Flyaway must plan to keep going all the way and all the time if she expected to achieve anything worth while.

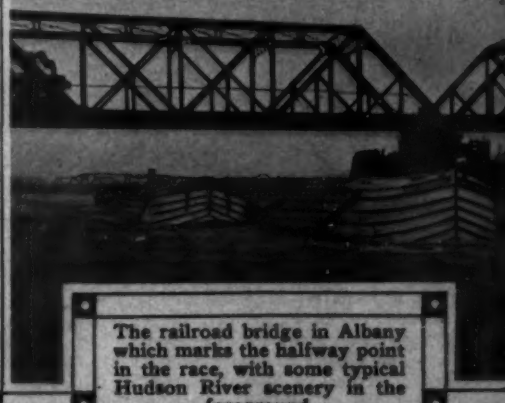
(Continued on page 70)



Commodore W. H. Spiegelberg and two-thirds of the crew of Josephine II. The other third was busy with the camera.



Standard, Sr., in the offing, powered with a four-cylinder Wisconsin, and Amorita (Loew-Victor) winner in the open class on corrected time.



The railroad bridge in Albany which marks the halfway point in the race, with some typical Hudson River scenery in the foreground.

THE CRUISE . . . WE DIDN'T TAKE

BY BRADFORD BURNHAM

IT took us less than a week to decide on the cruise, hunt up a boat, buy it, fit it out, start, wreck it, and return home sadder and wiser mariners; but the consequent repentance has lasted ever since, and the rueful memories of this dire expedition are destined to last for aye. All of this is contrary to the usual order of things, but you will shortly find as did we that nothing about the cruise we didn't take was usual.

One cold, raw November afternoon we were puttering around the boat club yard listlessly regarding the craft already hauled out for the winter when the wanderlust which comes with depression appeared on deck with tremendous vigor and insistency.

"Let's buy a boat and go to Florida," exclaimed the skipper. We were both out of jobs, perhaps on account of the war and perhaps not, and so were very likely excusable for our depression and determination to end it.

"Sure," responded the mate-to-be, instantly. "Where'll we get a boat? How much will it cost? What'll we do with it when we get there?"

"Leave all that to me," rejoined the skipper, with superior wisdom. "All you've got to do is produce half the coin and come along."



The Pirate's cottage, which is filled with much treasure.



The skipper, the mate and Alice, just before the start of the cruise they didn't take.



The skipper wore a smile at starting—he didn't know what Fate had in store for them.

So we hunted up an owner as disgusted with life as were we, and who was glad to part with his little cruiser at a ridiculously low figure. We were confident we could sell out at Miami at a handsome profit, after a profitable winter chartering out to fishing parties, return north in a de luxe stateroom and retire on our winter's haul. The skipper had been over the ground before, as readers of MoToR BoatinG a couple of years or so ago will remember, and so ought to have known better. And it

of that sixteen hundred.

The silver thread which winds southward among the Connecticut hills to the Sound, and which is known as the Thames River, was undoubtedly as beautiful as ever that morning, but it was too cold to give much thought to it then, and our hearts beneath thick layers of overcoat, sweater and double woolen underwear, were filled chiefly with impatience and a mighty yearning to get to the land of palms and oranges. We made a preliminary effort to find a place for everything and to put everything there, however, and made out fairly well, though our trunk had to stay in the cockpit and the oil stove occupied most of the cabin.

might have been even so, but for the shipwreck, the cold and the Pirate.

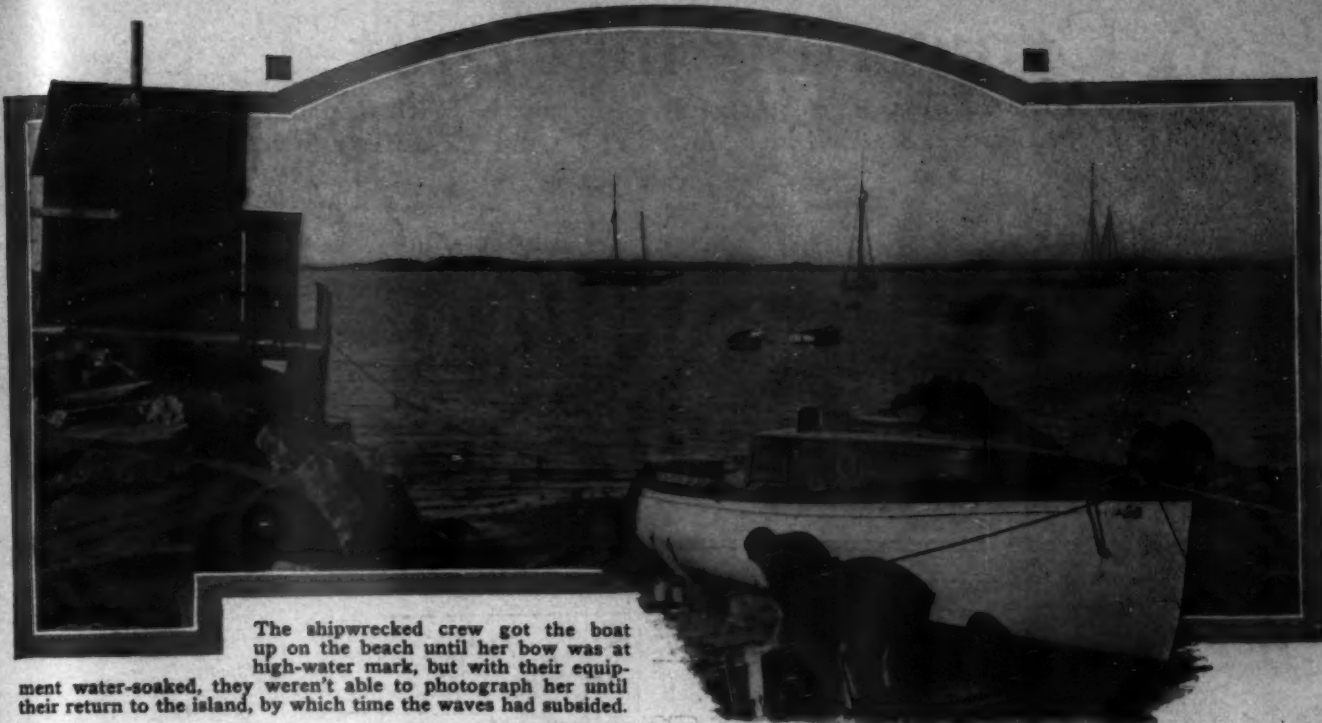
We stocked up with great haste, as it was past the middle of November and much too cold for comfort in the northern waters, and one clear, crisp morning chugged out from our home port of Norwich, Connecticut, bound for Miami, some sixteen hundred miles away. We made about forty

Still, we wouldn't have exchanged that oil stove for anything that night.

Alice was a trim little twenty-eight footer, trunk cabin type, only a year old, strong and well built by a local builder who knows how to construct boats for salt water. She had a roomy little cabin with extension berths on either side, and a more than usually generous-sized cockpit of self-bailing properties. Beneath the latter reposed the engine, a two-cylinder, 12 h.p. Lathrop. So much for the boat—a long enough description, surely, for a boat about to be wrecked.

It was noon when we cleared New London, queen of harbors, and still decidedly cold. The sky was free from clouds, but during the afternoon it hazed up, while the surface of the water took on the ominous glassy silkiness betokening trouble. Plum Island and the Gulls loomed up from the Connecticut shore with startling distinctness, like detached bits of land, floating in mid-air. A big towboat, with her long string of coffins trailing behind, stood out sharply from a great distance. You all know the effect; you can read the warning. There was something uncanny about it all.

As neither of us was an experienced Arctic explorer, we decided that life in the cockpit after sundown would be quite impossible, and as we had a head tide and didn't like the weather indications any too well, we put in shortly before sundown behind the convenient breakwater of Duck Island, just half way between New London and New Haven, and one of the most conveniently accessible harbors on the Connecticut coast. A four-acre island situated a mile and a third off the mainland opposite Grove Beach forms the starting point



The shipwrecked crew got the boat up on the beach until her bow was at high-water mark, but with their equipment water-soaked, they weren't able to photograph her until their return to the island, by which time the waves had subsided.

of two breakwaters, the old one stretching westward with a fixed red post lantern on the end, a newer and shorter one running northward toward the mainland. This forms an L-shaped harbor, protected from all quarters but the northwest, from which direction a high wind can make a troublesome sea for small boats because of the distance from the mainland. Some three miles farther west, off Kelsey Point, the government in its infinite wisdom has erected another breakwater, valuable chiefly as a haunt for blackfish.

We ran in behind the west breakwater and dropped the hook. The oil stove did its darndest, and after a few moments had rid the cabin of all oxygen and had warmed the nitrogen to a comfortable degree. A half mince pie added to our enjoyment and we talked of Charleston and Jacksonville as though they were but a short run distant.

Then came the gale, shortly after we had turned in. It began to blow from the northeast and we had the west breakwater under our immediate lee. With the wind—and there was some wind—came snow, followed by sleet. It steadily increased in intensity, until about midnight we decided it would be prudent to remove ourselves farther from that lee rock pile and nearer the windward one. This we did, after mixing up with a few moored craft obscured from view by the blackness and blinding sleet.

With the dawn came no abatement of the gale, but rather a renewed and increased onslaught. Solid water was now pouring over the weather breakwater, and we lengthened our anchor to the limit. We had a thirty-five-pound hook down, and it held perfectly, though we yawed around a full quadrant circle as the gusts and tide counteracted. We made ready our spare hook, a fifty-pounder, but did not put it down—then.

As we had taken on in our haste only a minimum amount of provisions, planning to stock up at New

York, we found that mince pie and coffee were about all we had on hand by noon, and were contemplating the feasibility of manufacturing batter cakes out of Gold Dust when our attention was diverted to the cabin of an adjoining catboat from which there emerged a man, a woman, and a dog. With difficulty they got into a rowboat and pulled ashore. The island was therefore inhabited! We would not starve! Even at this distance the man looked to us like a Pirate as he pulled away from his flagship.

It was not long before the big man pulled back to his cat and began putting reefs in his mainsail, emphasizing the tying of each reef-point with expressive terms which even the storm did not drown out. At length, after two hours' preparations, he started the motor and cast off, showing a tiny patch of sail to steady her, and towing an enormous Banks dory. He was bound for New Haven, gale or no gale, since, being a light keeper and a government employee, he must live.

By the process of elimination it was evident that the woman and the dog were still upon the island, presumably within the little shack, from which smoke was issuing cheerfully. Desperate for want of food, we got into our

jolly boat, and during a lull, rowed to the beach. Mrs. Light Keeper greeted us sweetly and the dogs vociferously. Our wants being made known, she immediately set about the execution of a fowl.

Meantime, perceiving that the early winter darkness would get us before the fowl was disposed of, we jolly-boated it back to Alice and set our riding light. And, woe betide! we moved the good ship in closer to the beach, where her position was more sheltered, and put down the big hook. The space was restricted, and consequently we reduced the amount of scope too much. Then—more woe!—the fowl being out of the way, we decreed that the icy, pitchy blackness, the leaking cabin roof of Alice, and the foaming seas which the jolly boat must negotiate with her scanty freeboard, were not to our liking as compared with a soft mattress on the floor of another cottage on the island. So we gave a last look at the cheerful, twinkling riding light and burrowed beneath several layers of blankets in the cottage. Deserters! We were soon to reap our reward!

The gale fell during the night, but first it increased and performed the mischief. Arising at the crack of dawn, we shivered forth and beheld—the cabin roof of Alice protruding horridly above the surface, in close communion with the west and lee breakwater! Rushing frantically out upon the rocks, and for once forgetting the cold, we found the poor craft in a sad plight. She was still afloat, for there wasn't enough engine in her

to sink her, but her starboard side had been reduced to a pepper box from pounding upon the jagged granite. Floating indiscriminately about the harbor was the self-jettisoned cargo, or at least that part of it which had not gone to the bottom or been held in the cabin. It was a pathetic spectacle.

That day was the longest in our
(Continued on page 49)



The patched holes were covered with box boards and the edges smeared with paint and asphaltum.

A Cruiser of the Scout Type.

A 40-Foot Bridge-Deck Express Boat of Attractive Appearance With Unusual Accommodations. To Be Equipped With a Six-Cylinder Motor Which Will Give Her a Speed of 20 Miles.

THE Saint Louis Yacht and Boat Co., of St. Louis, Mo., has developed a 40-foot express cruiser, Pegasus, which, while designed along military lines with the outward appearance of a small war vessel, is not so fully given up to the housing of machinery, having instead attractive, comfortable

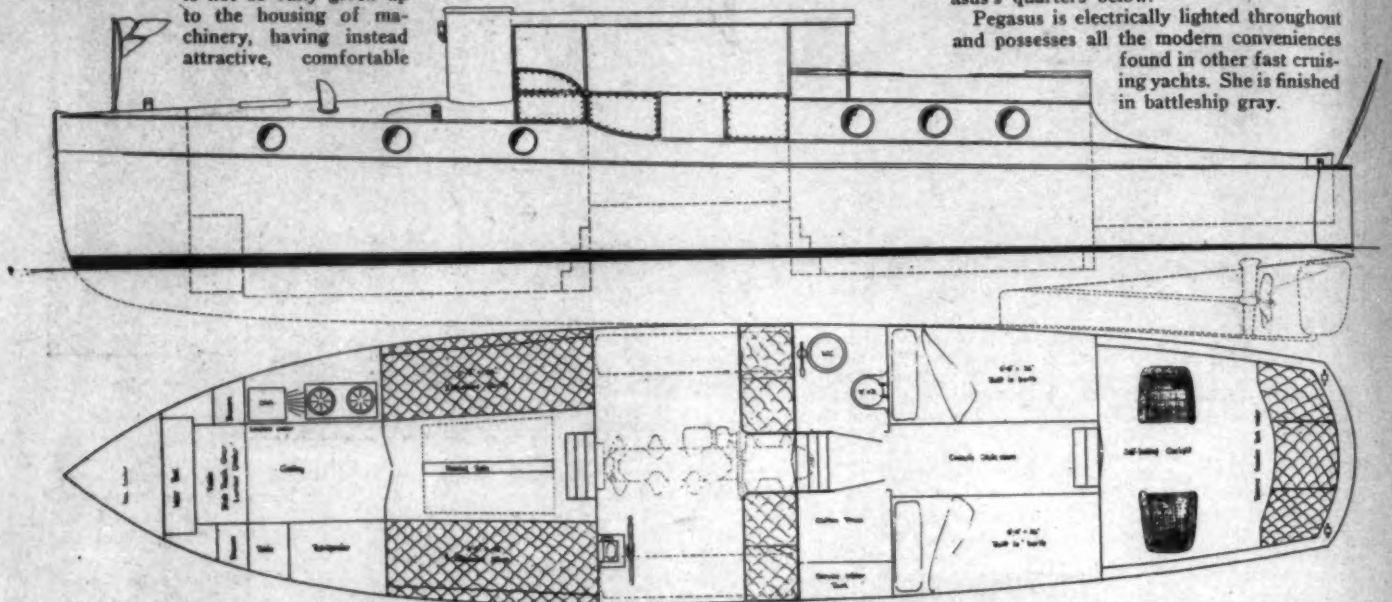
accommodations for a cruising party of six to eight.

The hull is of the V-bottom type, designed for speed and seaworthiness, and is heavily constructed, making it suitable for off-shore

ocean cruising, while the light draft suits it also for river and other shallow water work.

A six-cylinder $5\frac{1}{2}$ x 6-inch Van Blerck motor will be installed. A study of the plans will reveal the unusual roominess of Pegasus's quarters below.

Pegasus is electrically lighted throughout and possesses all the modern conveniences found in other fast cruising yachts. She is finished in battleship gray.



Pegasus's large bridge amidships is protected by an awning with drop curtains which entirely enclose it when desired.

Well-Designed Motor Houseboat.

THE accompanying plans of a houseboat, designed by Frederic S. Nock, of East Greenwich, R. I., show an interior arrangement comprising an engine-room and crew's quarters forward and owner's quarters aft with a large gasoline tank separating them. The galley is also situated at the after end, access to this compartment being had from the after deck. The galley which is arranged for a Shipmate stove, dresser, provision lockers, refrigerator, etc., communicates also, with the saloon immediately forward.

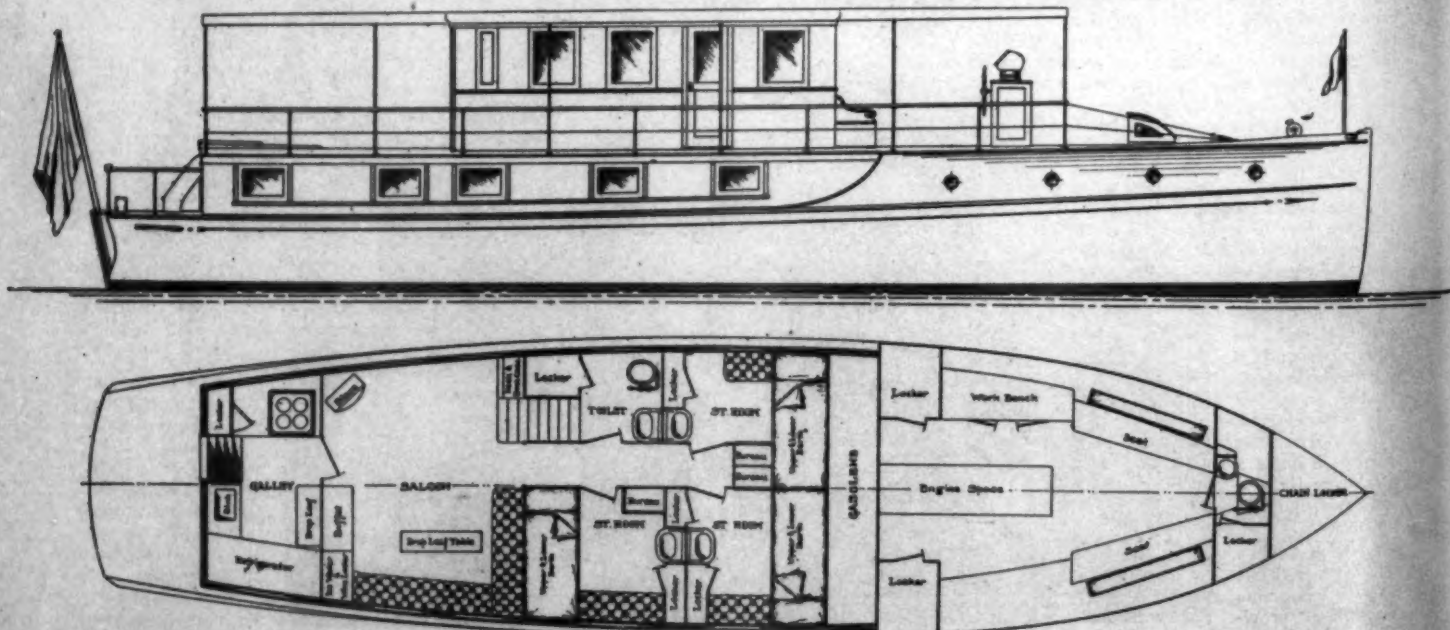
This compartment in its turn may be entered from the deck house.

The saloon is ten feet in length by the full interior width of the boat, making a large and spacious room with plenty of floor space. The furnishing consists of a small stove, desk and bookcase, buffet, wine locker, drop leaf table and divans. On the starboard side forward there are two staterooms which contain upper and lower berths, clothes press, bureau, lockers and lavatory. Opposite, on the port side, there is another stateroom

with the same accommodations and aft of it a toilet room. The interior finish below is in white enamel with mahogany trim.

The deck house is arranged for chairs and table, with a small seat at the after end and space for a Victrola. The after end of the house is carried beyond the house proper, affording shelter from the wind.

The power plant is to be an engine developing about 90 h.p. The boat's dimensions are 63 feet 6 inches length, 15 feet beam, and 3 feet 6 inches draft.



Two entrances are provided for the owner's quarters aft, and a companionway forward gives access to the crew's quarters and engine-room.



Alsorie III, a 51-foot motor yacht owned by Vice-Commodore Burnell of the Boston Yacht Club.

ALSORIE III, several pleasing exterior and interior illustrations of which are shown on this page and the one following, was designed by Swasey, Raymond & Page, of Boston, Mass., and built by the Camden Anchor-Rockland Machine Co., of Rockland, Me., for C. N. Burnell, of Boston, Mass. She is 51 feet in overall length and her beam extreme is 10 feet 1 inch, while her draft is 4 feet 2½ inches. The fuel capacity is 180 gallons.



Commodore and Mrs. Burnell on after deck.



The engine-room, containing a 40 h. p. Knox motor, is situated under the bridge deck.



Alsorie's exterior arrangement is pleasing.

Photographs by Stobbins.

The hull was constructed with the frame throughout of Maine oak, the planking of North Carolina pine, the decks of white pine and the clamps of yellow pine; the planksheer, the sides of the raised deck, and the sides of the house are of mahogany, and the interior is in cypress trimmed with mahogany. The fastenings throughout are copper and bronze.

The general arrangement plan of the boat is as follows: There is a double stateroom forward, having clothes lockers forward of the berths and drawers under them. This compartment is connected with the owner's toilet room on the port side aft, and with the bridge deck by a companionway opposite the toilet. Following the owner's stateroom and under the bridge deck is the engine-room, containing, principally, a four-cylinder 30 h.p. Knox motor, which drives the boat at a speed of 8 knots. Other engine compartment equipment includes two gasoline tanks, carried on either side, pipe berths, workman's bench, etc.

The galley, following on the starboard side, is excellently arranged, having a Shipmate range with coal chute leading from a manhole on deck to a box under the stove, sink



On the left, the main cabin which is furnished with fixed berths, folding mahogany table, etc., and on the right, the owner's stateroom forward, which is entered from the bridge deck.

fitted with hot and cold water, and the usual other equipment. On the port side of this section is another toilet room. The main cabin comes next, and is excellently fitted up

with transom berths built in on each side, portable mahogany table in the center, and special lockers and buffets.

There is a short deck aft of the main

cabin, under which are carried the water tanks and general cruising duffle.

In outboard appearance Alsorie III is very attractive.

An Interesting Double-Stacker.

ONE of the most interesting designs from the board of William J. Deed, Jr., the Boston naval architect, is shown herewith. This 47-foot express cruiser combines many interesting features not found in the ordinary cruiser of her size. A double-stacker, she has a roomy cockpit in the stern, from which a companionway leads to the after cabin. Two extension transom berths make room for two or more in a pinch, and this cabin also has a buffet, closet and two book-

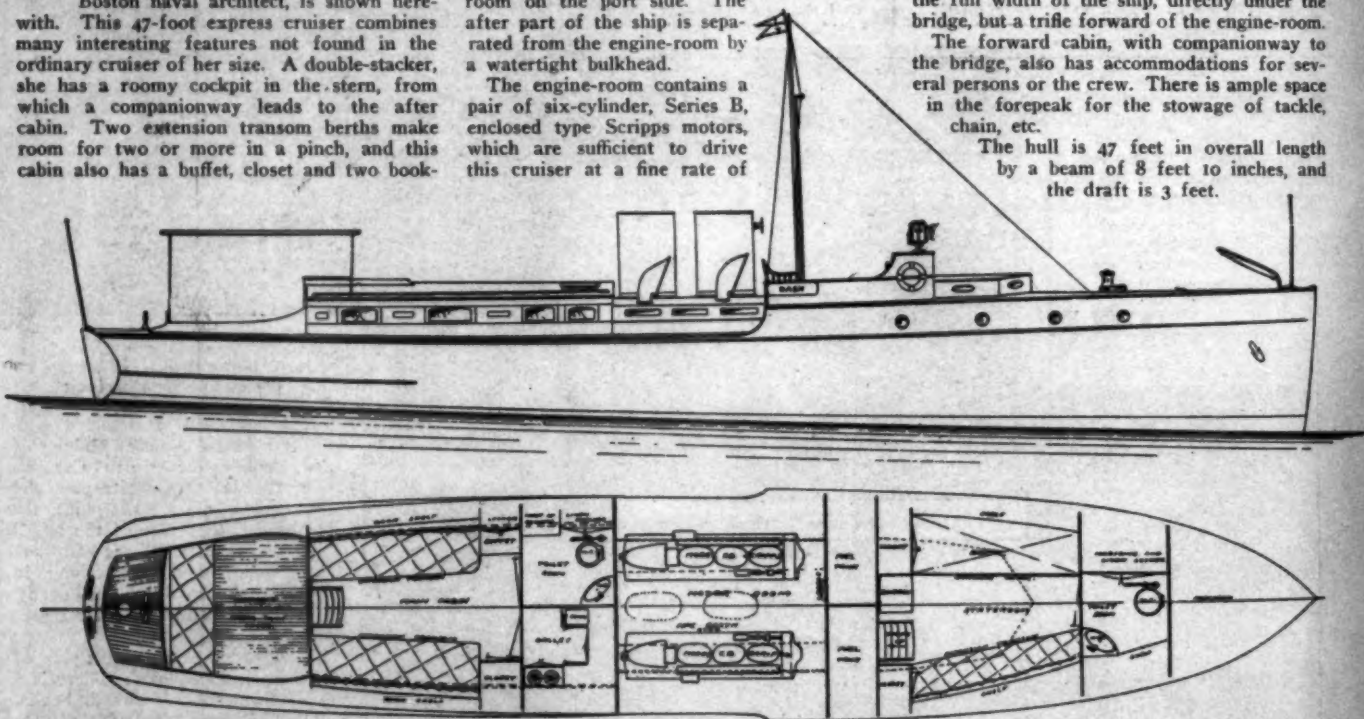
shelves. The galley, on the starboard side, leads from the after cabin, as does the toilet room on the port side. The after part of the ship is separated from the engine-room by a watertight bulkhead.

The engine-room contains a pair of six-cylinder, Series B, enclosed type Scripps motors, which are sufficient to drive this cruiser at a fine rate of

speed. The engine-room is reached by means of an upright ladder. The fuel tanks are built the full width of the ship, directly under the bridge, but a trifle forward of the engine-room.

The forward cabin, with companionway to the bridge, also has accommodations for several persons or the crew. There is ample space in the forepeak for the stowage of tackle, chain, etc.

The hull is 47 feet in overall length by a beam of 8 feet 10 inches, and the draft is 3 feet.



This express cruiser, having a length of 47 feet by a beam of not quite 9 feet, is to be powered with two six-cylinder Series B Scripps motors.



A 35-foot speed boat built by the Racine Boat Co., of Racine, Wis., for use at the U. S. Lifesaving Station at Duluth, Minn. She is strongly constructed and with a 40 h. p. four-cylinder Capitol motor makes 19 miles an hour. She is a handsome boat and her fittings include full electric lighting equipment.

Aⁿ 18-Mile 47-Foot

V-Bottom Cruiser

Wakonda under full speed. ■

WAKONDA, a very attractive V-bottom cruiser, was designed by William H. Hand, Jr., of New Bedford, Mass., and built by S. C. Wardwell, of Bristol, R. I., for A. Gardiner Cooper, of New York City.

Mr. Cooper's new boat is a complete little cruiser with exceptional accommodations and speed above the average. The boat is of the bridge-deck type in arrangement, with the main cabin under the raised freeboard, where are also the galley and the toilet room. Headroom is provided in the fore end of the motor room by an extension of the center section of the raised freeboard deck, and the motor is installed under the bridge deck amidships. A fine

Photographs by Levick.



Full automobile control is brought to the bridge deck.



The companionway entrance to the stateroom aft.

The six-cylinder Van Blerck is set beneath the bridge deck.

stateroom is provided aft under the trunk cabin, complete with toilet room and closets. The main cabin provides sleeping accommodations for four and the stateroom aft provides berths for two, while the crew's quarters are in the motor room. In all compartments there is full headroom.

The general finish is in white and mahogany and the boat presents a most pleasing appearance.

The motor is a six-cylinder, 5½x6-inch Van Blerck, installed with full automobile control, including electric starting and lighting. This power plant gives the boat a sustained



Accommodations for four are provided in the main cabin.

cruising speed of 18 statute miles an hour.

In addition to being a most complete cruiser in matter of accommodations and speed, Wakonda is considered a wonderfully good sea boat, most dry and comfortable under all conditions. Her lines are much like the famous Flyaway III, which is so notably adding to her laurels this year.

The dimensions are, length overall, 47 feet, beam, extreme, 9 feet 10 inches, and draft, extreme, 3 feet.

Wakonda flies the flag of the Indian Harbor Yacht Club.

Betty M, a 48-Foot Express.

A Fast Cruiser Now Building for Commodore C. W. Kotcher to be Provided with Over 200 H. P. Speed in Excess of 25 Miles per Hour Expected from Twin Sixes.

BETTY M, now building for Commodore Charles W. Kotcher, of Detroit, by the Church Boat Co., will prove a notable addition to the fleet of fast and handsome cruisers to be seen in Florida waters this coming winter. She was designed by Carlton Wilby, of Detroit, and is very similar in model to the well-known express cruiser Ouananiche, built from his designs last year.

In Betty M nothing has been sacrificed in strength or seaworthiness to attain the desired speed. The owner's quarters show a

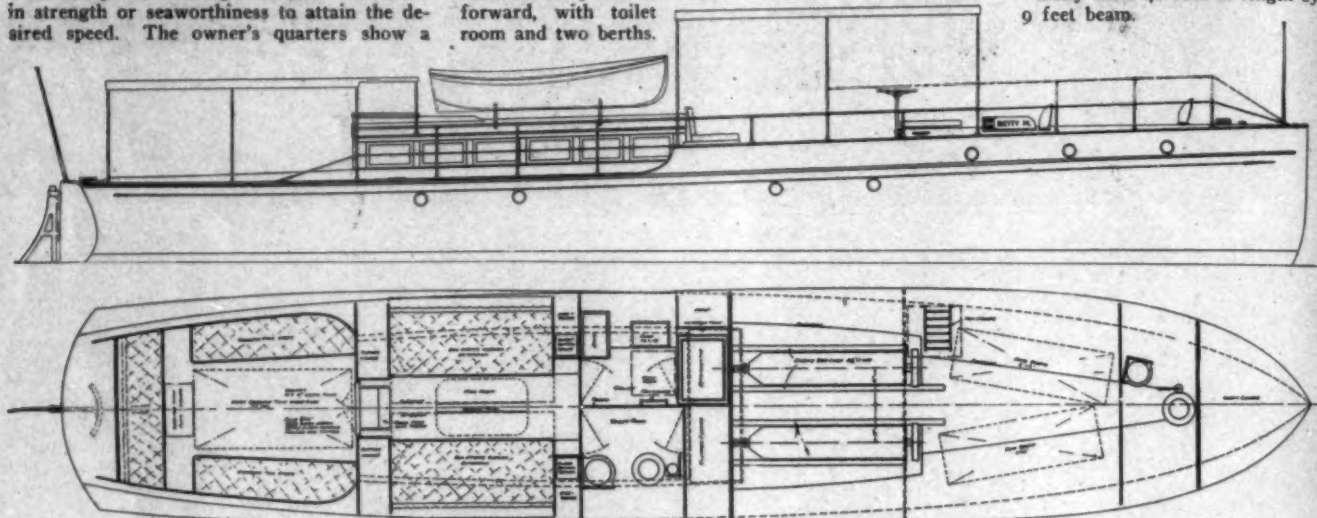
large and well appointed toilet room forward on the starboard side, with a completely equipped galley to port. Aft of this is the main cabin, the chief features of which are two sideboards, fitted with removable sections in the top, below which are installed glass bottoms for viewing the beautiful sea gardens for which the Nassau waters are famous.

Commodious and comfortable quarters for the crew are provided forward, with toilet room and two berths.

The engines are located at the after end of this compartment, partly under the bridge deck, with a watertight bulkhead between the engine-room and the owner's quarters.

The engines will be two Model E-6 Van Blerck machines, guaranteed to develop 116 h.p. each, at 1,200 r.p.m. equipped with electric self starters. With this power it is confidently expected that a speed of 25 to 27 miles per hour will be maintained.

Betty M is 48 feet in length by 9 feet beam.



As will be seen from the lines, Betty M is long and narrow, while her excellent accommodations are equally noticeable.

A New Hand 18-Footer.

HERE is a new V-bottom, 18-footer, designed and built by William H. Hand, Jr., of New Bedford, Mass., for William Wallace, of Boston, for use at Nantucket. The little boat is one of Mr. Hand's standard

V-bottom runabouts of attractive appearance; she is handsomely finished in mahogany and polished bronze metal work. The boat is equipped with a 20 h.p., 33 $\frac{3}{4}$ x 5-inch Loew-Victor motor, fitted with full automobile con-

trol. This power installation gives a speed of 19 miles under service conditions.

The dimensions of this new V-bottom are, length overall, 18 feet; beam, 5 feet, and draft, 20 inches.



This little runabout, designed and built for William Wallace, of Boston, for use at Nantucket, is equipped with a 20 h.p. Loew-Victor motor which gives her a sustained speed of 19 miles an hour. Full automobile control is provided.

PRIZE CONTEST IN QUESTIONS AND ANSWERS

Clearing the Propeller

Simple Home-Made Devices That Can Be Used for Removal of Rope and Other Entanglement.
Pruning Shears, Boat Hook and Old-Fashioned Jack-Knife Various Suggested.

THE PRIZE CONTEST—Answers to the First Question in the June Issue.

Pruning Shears Most Useful.

(The Prize-Winning Answer.)

HOW a line gets overboard and into the propeller and why any drift capable of fouling the wheel always seems to find its way there we cannot explain, but it must be removed just the same, and sometimes before the boat can be operated.

The most natural thing to do in a case like this is to reverse the propeller in an attempt to unwind the entanglement. This may work with grass, but lines and wire (wire is encountered in shallow water or fast to drift) are not generally to be cleared by "backing and filling."

Next generally comes the boat hook, and with a sharp edge on the inside of the hook it would prove fairly efficient, or a knife may be securely fastened to the pike.

Then the engineer usually goes overboard with a knife, and, if he is a good diver, generally does the job. Swimming is a pleasant pastime, but necessity removes the pleasure, especially in late fall weather.

Since the boat hook has not a sharp edge and the engineer does not always care for a cold plunge, we shall devote a little of our spare time to making a device which even goes the sharp boat hook one better.

You will all readily recall the tree-pruner on a long pole with the knife worked by a lever at the other end. There are but three parts to the knife, and the handle and lever are so simple that it is not necessary to describe them.

Two pieces of sheet iron cut from 1/16-inch stock and riveted together with a washer (a short section of 1/4-inch gas pipe) between, so as to allow the knife clearance, make the frame; and the knife is made from a piece of steel. The sides of the frame fasten directly to the pole and the knife is operated by a stiff wire led through screw eyes and connected with the lever.

The shape of the knife gives a shearing cut capable of cutting quite some wire. The stock article can be purchased at any hardware store for the price of a few cigars. This knife has the advantage over a plain hook knife in that no pull on the pole is necessary and the shearing cut gives greater cutting powers.

Simply feel for the line or whatever is there and pull down the lever, leaning over the stern or getting in the tender to do the work.

W. B. M., Newburgh, N. Y.

When you send in your answers you must state what you will take for a prize should you win one.

Questions for the October Issue.

1. How can a burned-out crankshaft or connecting rod bearing be temporarily repaired?

Submitted by D. S. Ward,
Lockport, N. Y.

2. Give, with illustrations, a method of carrying an extra supply of lubricating oil, with means for conveying it to the main oil tank on the engine or to the crankcase by pump, gravity, etc.

Submitted by H. H. Parker,
Oakland, Cal.

3. Describe and illustrate the construction and installation of a bow rudder on a speed boat.

Submitted by Charles Jensen,
Manistee, Mich.

RULES FOR THE CONTEST

Answer to these questions, addressed to the Editor of *MoToR Boating*, 119 West 40th St., New York, must be (a) in our hands on or before August 25th, (b) about 500 words long, (c) written on one side of the paper only, (d) accompanied by the senders' names and addresses. (The name will be withheld and initials or a pseudonym used if this is desired.) Questions for the next contest should reach us on or before the 25th of August.

The prizes are: For each of the best answers to the questions, above any article advertised in the current issue of *MoToR Boating*, of which the advertised price does not exceed \$25, or a credit of \$25 on any article advertised in the current issue of *MoToR Boating*, which sells for more than that amount. (There are three prizes—one for each question—and a contestant need send in an answer to but one if he does not care to answer all three.)

For each of the questions selected for use in the next contest, any article advertised in this issue of *MoToR Boating*, of which the advertised price does not exceed \$5, or a credit of \$5 on any article advertised in this issue of *MoToR Boating*, which sells for more than that amount.

If you win the prize you must allow us to do the ordering of the prize you select.

will not slip off the knife. A screw or a cotter pin may then be inserted to hold the knife in place. The knife in the end should have a peaked point to enable one to insert it between the shaft and the entangled rope. To fit this the end of the staff is ripped up far enough to insert the knife and make it solid when two screws are put in to hold it in place.

When not in use the knives may be taken out, oiled and put away in a locker, the screws being left in the boat hook.

McM., Bar Harbor, Me.

Goes Overboard.

DURING the past four seasons I guess I have gotten every piece of rope, wire, etc., in my vicinity tied in forty thousand knots around my propeller. While weeds are much easier to remove, they are much more troublesome, as the river is full of them. The easiest way I've found to get rid of these nuisances is to get the boat into shallow water and get overboard and cut or pull 'em off. The weeds come off easily. The ropes require a knife and the wire a pair of pliers. I carry a large knife of the "Barlow" type and try to keep it sharp, and a pair of pliers of large size with diagonal cutting edges takes care of everything the knife won't cut.

I have bored a hole through the handle of each of these tools and always fasten a string to them, so that if they slip there is no time lost in their recovery.

If I happen to be near a dock I back the boat up to it and by slipping a rope under the stern can usually pull her up until she rests on the dock. Then, sitting on the edge of the dock, I can work in much greater comfort than when standing shoulder deep in muddy water.

H. H. B., Schenectady, N. Y.

Extension Shears.

ASUITABLE device for the purpose consists of a pair of shear blades set at a right angle to a galvanized pipe housing which contains an inner pivotal rod member, the latter being welded to the lower shear blade, while the housing is screwed into the upper blade. Suitable handles afford the necessary leverage; a nut and check nut are provided for the end of the pivotal rod. The device is operated from a skiff or landing, the cutting strain tending to tighten rather than loosen the threaded parts. The shear blades are made with short rear extensions for cutting tough material, while the long blades take care of grass and weeds.

J. F. C., Providence, R. I.

Adapting the Boat Hook.

IHAVE had some very annoying experiences from fouling the propeller with the tender painter, and also from snagging it when running among lobster traps, trawl buoys and rock weed, and the tedious job of clearing it with the gaff in a seaway suggested a simple device consisting of a common boat hook drilled and fitted with two knives. One of these is in the end and the other is inserted in the staff opposite and above the hook.

Purchase two pointed knives without handles and cut the ends off where ordinarily the handles would drive on. Then take the hook and knives to a machine shop for cutting slots in the staff that will fit the knives. The slot for the upper one must be cut at a slant upwards of about 60°, so that the rope

The Automatic Throttler.

Design and Construction of Several Governors Which Will Prevent Racing When Clutch is Out. Type Controlled by Clutch Lever Most Favored by Contestants.

THE PRIZE CONTEST—Answers to the Second Question in the June Issue.

Meets All Conditions.

(Prize Won—Camera.)

THE governor shown in the sketch was designed to prevent the motor racing when throwing out the clutch, and was so constructed that no machine shop work was necessary. The principle is a butterfly throttle valve between engine and carbureter, so actuated by the movement of the reverse gear or clutch handle that when the latter is set either on forward or reverse, the former is wide open, but bringing the handle to neutral closes the valve, thereby limiting the speed of the engine to any desired number of revolutions.

The valve, as shown in the drawing, is made principally of brass pipe and fittings. It will be noticed from the drawing that the valve motion cannot, for mechanical reasons, be 90° from the closed to the open position. The area for the free passage of the gas through the valve is therefore reduced. It is likewise reduced by the introduction of the valve and stem, and with this in view the valve chamber was made of larger size pipe than the intake from the carbureter, thereby avoiding any restriction to the flow of gas. The carbureter pipe of the outfit shown in drawing is 1-inch, and the nipple forming the valve is 1½-inch pipe, with a brass reducer at each end. The socket and stuffing box for the valve stem are made of ¾-inch brass pipe, screwed into the large nipple and soldered in place. The valve stem is of brass rod, 5/16-inch diameter, squared on one end to take the valve lever, and split with a hack saw at the other end, to receive the valve. The valve is thin sheet brass, cut to fit loosely in the pipe, and drilled, as is also the valve stem, to receive the small screws and nuts. These should be soldered in place after assembling, to prevent unscrewing.

As it is not intended to stop the motor entirely, the valve should fit loosely enough to allow sufficient gas for operating the motor at the desired revolutions with the clutch out. This speed can be gotten by trial, boring holes in, or trimming down the valve as may be found necessary to admit more gas. The connecting rod is of 3/16-inch diameter metal, and merely bent down at the forward end and dropped into the hole in the valve lever. This allows unshipping readily, should it be de-

sired to run the engine at high speed with the clutch neutral. The after end is provided with a jaw such as is used in engine control gear, and is attached to the clutch handle. The proper place on the handle to connect this rod should be found carefully so as to give the valve the proper throw. This can be done

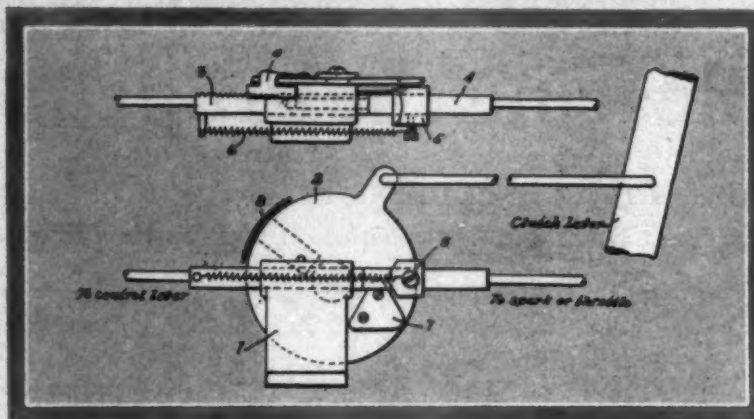
3 and 4 normally together. Mounted on disc 2 is the cam point 7. On the back of 3 is a row of teeth for engaging the lock spring 8 mounted on disc 2.

Assuming that the spark or throttle is to the right of the device and the control levers to the left, the operation is as follows: When the clutch lever is brought to the central or neutral position, the cam disc is turned, causing the cam point 7 to engage block 5, forcing the right hand section of the control rod 4 to the slow speed position. Just before this takes place, the lock spring 8 engages one of the teeth spaces in 3, preventing the control lever from changing position.

When the clutch is again thrown in, the spring 6 brings the rod 4 back into 3 against its shoulder, while the lock spring 8 leaves rod 3, leaving the speed setting as it was before the clutch was opened.

It will be seen that the control is free to be operated by hand when the clutch is in on either forward or reverse, as in either of these positions the cam point and lock spring are out of contact with the control rod. In every instance the control setting resumes its original position.

J. F. CAVANAGH, Providence, R. I.



Cam disc with clutch lever control, devised by Mr. Cavanagh.

by holding the rod by hand at places on the handle, and observing the resulting throw, shifting the position around until the proper point is located.

W. ELMER MOTZ, Philadelphia, Pa.

An Oscillating Cam Disc.

THE drawings illustrate a device which will operate either the throttle or spark to reduce the speed of the engine at the critical moment when the clutch is thrown out. Number 1 is a support mounted at some suit-

clutch is in on either forward or reverse, as in either of these positions the cam point and lock spring are out of contact with the control rod. In every instance the control setting resumes its original position.

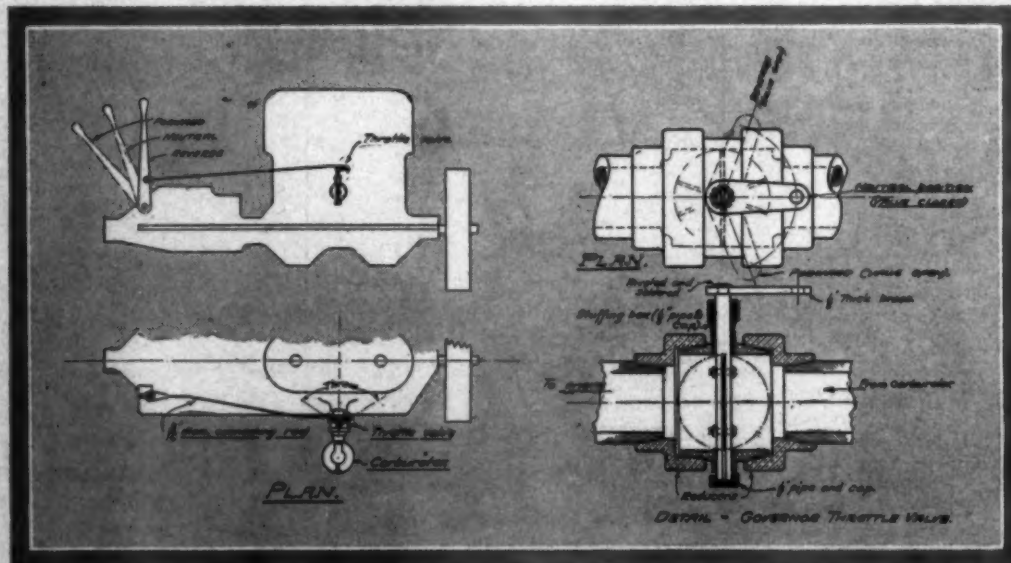
The Fly-Ball Governor.

THE most satisfactory form of governor is the well-known fly-ball type, some form of which is used to govern most large steam and internal combustion engines. These

governors may be run at almost any speed and may be either belt or gear driven, but on a marine engine the governor should be gear driven for the sake of reliability.

A governor suitable for the average medium-heavy-duty motor, which is the type of motor most often requiring a governor, is shown in the accompanying drawing. It is designed to run at ½ the engine speed, so

that it may be mounted on the vertical timer shaft of a four-cycle motor, and when suitably connected to the throttle valve and properly adjusted it should maintain an engine speed of about 500 r.p.m. With the spring shown, the weights begin to rise at 480 r.p.m. and the spring lever comes up against the safety stop pin at 540 r.p.m. The lengths of the two levers, drawn in a broken line, which serve to connect the governor to the throttle control



The prize-winning governor—Mr. Motz's design has the merits of simplicity and positiveness.

able place on the side of the engine. Pivoted on this support is a cam disc, 2, oscillated by the movement of the clutch lever as shown. A long guide hole is provided for the control rod, said rod consisting of two parts, 3 and 4, one slidably mounted in the other, shown by dotted line in the plan view. An adjustable cam block is mounted on part 4 and is retained by a set-screw. A spring, 6, stretched between block 5 and the pin in 3 holds the parts

lever and the throttle valve itself will of course vary with the individual motor on which the governor is to be used. No supports are shown for the shafts carrying the spring lever, the throttle control cam, and the safety stop pin, as these supports must be made to fit the motor and locate the shafts and pin in the positions shown. The spring is shown diagrammatically. It should be made as long as it conveniently can be and should be made too strong at first and then ground down until it meets the specifications. Some method of adjusting the spring while the motor is running should be provided as shown in the drawing.

This design was adopted so that there should be but one spring, and that one adjustable with the motor running. It will also be noted that partially closing the throttle allows the weights to lift until the thrust collar comes down against the spring lever, so the governor is always "in communication" with the throttle valve.

The workmanship should be good. The weights must swing freely, but not rattle, and the sleeve and thrust collar must be an easy sliding fit on the timer shaft which was assumed to be one-half inch in diameter. One set screw would hold the governor on to the timer shaft; the other one is really a balance weight. A clearance of one and one-quarter inches should be allowed between the weights at rest and the nearest fixed objects so they will not foul anything when they rise.

W. MACK ANGAS, Jacksonville, Fla.

Governing by Air Pressure.

THE type governor which I will recommend will need careful adjusting of the respective parts, as is the case in all such delicate mechanism. The hand movement, commonly seen on an ordinary pressure gauge dial, is the principle involved herein, since it will be effective in shutting the throttle on the carburetor. As it is also necessary to have a governor that will release itself as soon as its work is done, a spring is fitted as shown in the sketch to bring back the plunger in the governor as soon as the engine has reached its desired speed. As the average engine is not

allowed to run free except for a few minutes, this method should work to perfection. When it is desired to leave the engine running free for any length of time, the proper way will be to throttle it down.

In operation this type of governor is quite simple, taking up little room and having few working parts. The pipe end of the governor is carried to the air tank or water jacket or the muffler, and as the engine speeds up, the pressure in the tank is immediately raised, thereby forcing out the plunger in the governor. The spring in the governor is adjusted to a pressure in the tank when the engine is

bureter, but it can also be arranged to work on a shut-off valve on the supply pipe line.

The fittings for this governor will be best made out of brass, with the plunger rod of rolled bronze. The ends as shown are made up of castings, but can be simplified by using pipe caps instead, with a bushing fitted in the way of the plunger rod. As soon as the engine is running again at its usual speed the pressure in the tank will decrease, owing to a blow-off valve fitted on same and set at the desired pressure. As soon as the pressure on the plunger is lessened the spring in the governor will force back the plunger, thereby closing the throttle on the carburetor and allowing the engine to speed up again at about the desired time the load is again thrown on it.

WILLIAM RENZ,
Quincy, Mass.

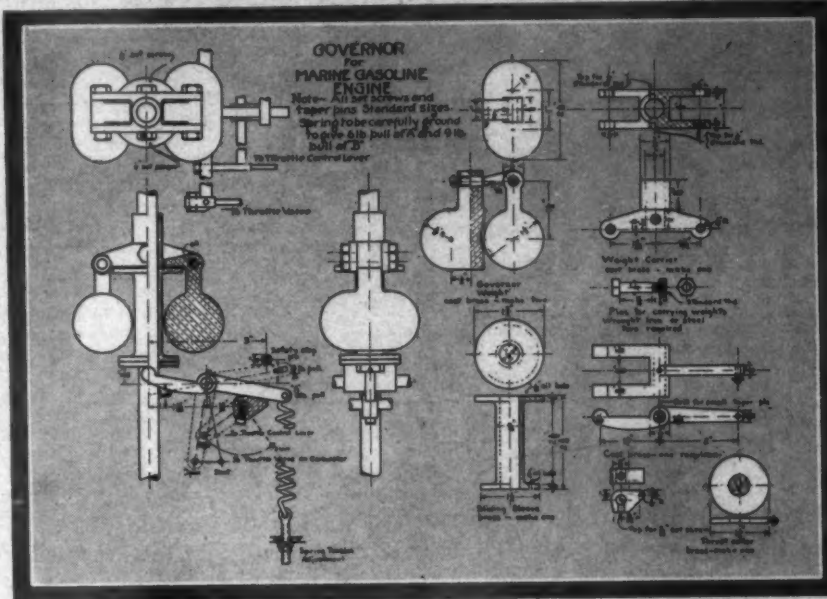
Simplicity the Keynote.

At times it is necessary to pull out the clutch suddenly to avoid a collision, or to stop quickly for some reason or other. When this is done the engine races and the sensation is anything but pleasant to those riding in the boat.

The easiest way to prevent this racing is to provide an auxiliary throttle, which is operated automatically when the clutch is pulled. The simplest form of such a governor is shown in the

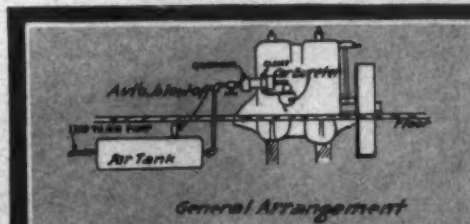
attached sketch. It consists of four parts: A housing (1), which is cast from brass. The pattern is so simple that any one can make it himself. No core box is necessary, as the cored hole is a straight cylinder, and every well-equipped foundry carries such cores on hand. The only machine work necessary is the cutting of a standard pipe thread on each end, and drilling the hole to take the valve stem. The lever (2) may be made from a rod or cast in the form shown. The valve disc (3) is made from a piece of 1/32-inch brass sheet. The valve rod (4) may be made from a short piece of 1/4-inch rod. A small shoulder should be turned on one end and a 1/32-inch slot milled as shown.

To assemble: Slip the disc into the slot in the valve stem and drill two 1/32-inch holes through both as shown. Remove the disc and place the rod as shown in the assembly sketch (5). Rivet the disc in place with small copper rivets. Slip the lever over the end of the rod and

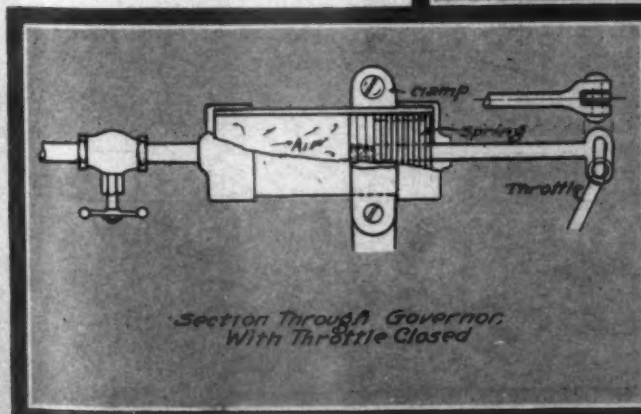


The fly-ball type of governor, as designed by Mr. Angas.

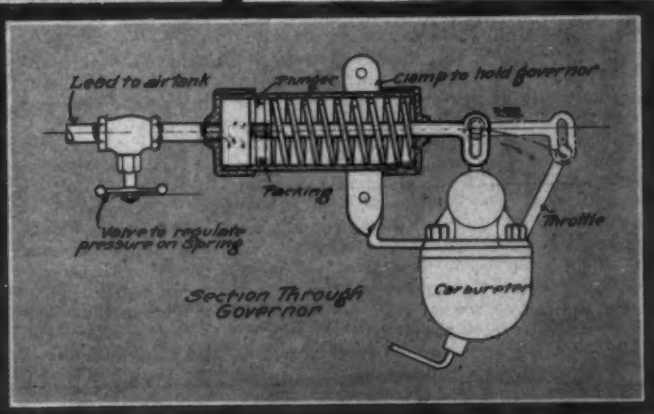
running under its full load, and it is a simple matter to figure out the necessary size spring to suit any given pressure. After this is decided the governor can be adjusted by the valves on the pressure pipe. These should be equally balanced when the engine is running under its maximum load, so that the least pressure in the air tank or water jacket will force out the plunger in the governor, thereby shutting the throttle on the carburetor to a desired opening. The governor will be most effective when placed so as to control the car-



General Arrangement

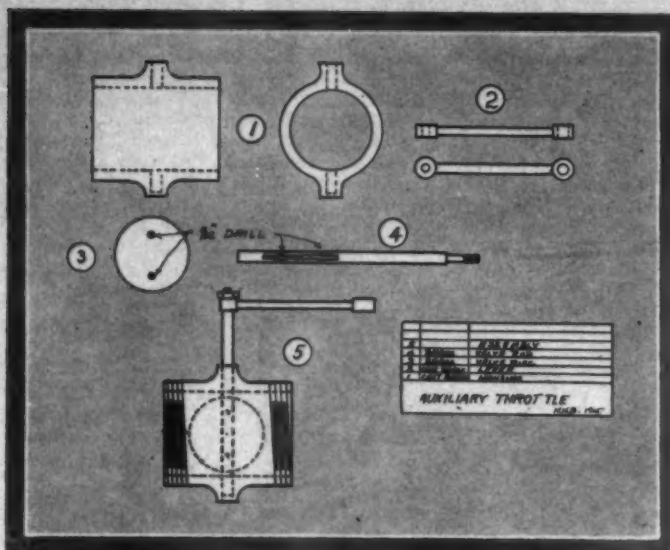


Section Through Governor With Throttle Closed



Section Through Governor

An ingenious automatic governor which operates by air pressure. Mr. Renz's device can be fitted either to the carburetor or to the gasoline supply line.



An auxiliary throttle, designed by H. H. B., which requires little machine work.

clamp in place with a nut. Screw one end of the housing into the intake on the motor, screw the carbureter into the other end and your

ratio of arms in this proportion the throttle will again open when the clutch is pulled into the astern position.

throttle is ready for operation.

The lever of this throttle is connected to the operating lever of the reverse gear or clutch with two pieces of $\frac{1}{4}$ -inch brass rod, the connection being made through a lever which is pivoted on the reverse gear or engine bed. The ratio of the arms on this lever is such that when the clutch is in neutral the disc is perpendicular to the axis of the housing. When the gear is in the head position the disc should be parallel or very nearly parallel to the axis. With the

No dimensions are given on the sketch because every size of carbureter will require a different size, but the outside diameter of the housing must be the same as that of a standard pipe of the same size as the thread on the carbureter. The diameter of the valve disc should be $\frac{1}{16}$ -inch to $\frac{1}{8}$ -inch less than the inside diameter of the housing. This clearance is necessary to prevent choking the motor down until it stops.

H. H. B., Schenectady, N. Y.

Value Proved by Usage.

THIS governor is intended for application to a marine gasoline engine and is used to prevent the engine from racing when running idle or when the clutch is suddenly thrown out. It is only to prevent the engine from running above its rated speed, so the spring tension, when once adjusted, is always the same.

It is designed so as to have the minimum amount of machine work, and if one makes his own patterns and runs the governor from a belt it should not cost over four or five dollars. If gears are to be used, which have to be specially made, the cost will be higher.

The apparatus shown in the drawings was attached to a Buffalo heavy-duty engine and was first belted off the crankshaft but later geared up to the magneto by a special gear (Continued on page 40.)

Locking Through.

Desirable Types of Fenders for Use on the Medium-Sized Cruiser in Traversing Canals and Locks. Protection of the Boat's Topsides and Convenient Stowage Among the Considerations.

THE PRIZE CONTEST—Answers to the Third Question in the June Issue.

Sennit-Bar Combination.

(The Prize Winning Answer.)

THE ordinary fender of braided rope, or canvas stuffed with cork, rarely does the work required, and three years ago I devised and am still using on my cruiser, Netop, a round bar of spruce about five feet long, and five inches in diameter.

Five or six inches from each end bore a $\frac{3}{4}$ -inch hole; pass through this a piece of $\frac{3}{4}$ -inch or $\frac{1}{2}$ -inch rope about six feet long which should have a good knot worked in one end. When the bar has been pushed hard against the knot, pass the bight through the eye of a two-manila braided sennit fender, which keeps the bar from marring paint on boat and by its bulk adds to the effective work of the combination as it (the bar) hangs in a horizontal position from the rail. The entire outfit can be easily laid on deck inside the rail when not in use or can be quickly untied and shifted to the opposite side of boat.

J. RICHARD TAYLOR, Brooklyn, N. Y.

Will Not Mar the Paint.

AFTER numerous trials to devise fenders which would not only protect the boat when locking through a canal, but would not collect all the slime from the sides of the locks and deposit it on the paint every time they were used, the canvas bags shown in drawing were selected as the most suitable. They have the advantage over the round type of either wood or rope fenders that they will not roll around as the boat scrapes against the side of the lock, and, if a little care is used to place the same side to the ship each time they are used, the paint work need never become disfigured. At the end of each day's run a broom and a bucket of water will soon clean the side of the fender that has been exposed to the locks.

To construct them will require three yards of twenty-two-inch No. 4 duck and fifty feet of half-inch manila, and after cutting out the required shape, which may be square, if desired, although round is more shipshape, sew the two pieces together all but a small space

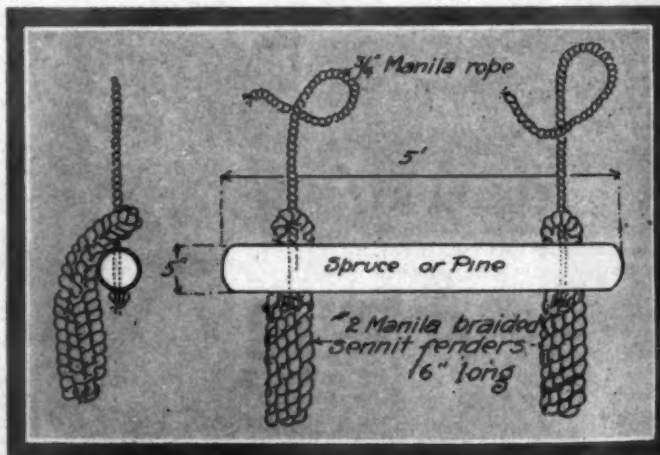
for stuffing the padding, which may be composed of oakum, excelsior, hay, or any other material on hand. After they have been

thoroughly filled, sew up this opening and rope with the manila, splicing the end at the top of the bag as shown and leaving the lanyard long enough to make fast to any convenient cleat or bitt where required. After the trip is over they may be ripped open, the padding discarded and the bags stowed away for future use.

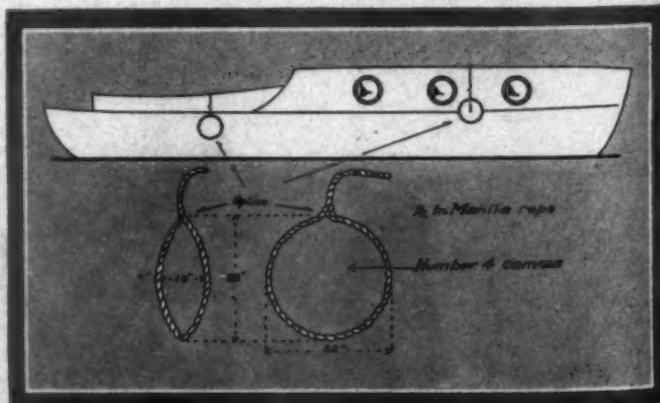
We found two of them sufficient, and after passing through the first lock it is easy to determine just where they will be of most service. In locking through it is a good plan to have two light lines long enough to pass around the spiles at the lock, so both ends will be on deck, as this will overcome the necessity of waiting for the lock tender to let go the line after he has opened the lock. It is advisable not to enter the lock ahead of a canal boat when going down, or after one when

going up, as the current of water is apt to part his line and allow him to crush you.

E. A. CRAWFORD, South Orange, N. J.



Mr. Taylor's fender can be stowed on deck and readily transferred from one side to the other as needed.



The chief claim made for Mr. Crawford's type is that it will not roll and smear the paint with grease.

Beer Bottles and Feed Bags.

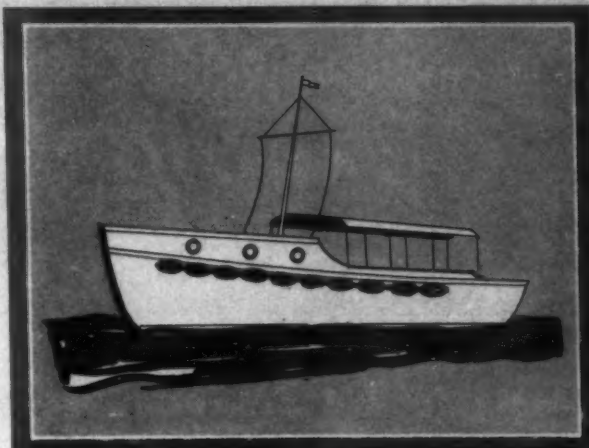
IF you have never made a trip through a canal, it is possible that you may make the mistake of not having good, serviceable fenders for the locks. About the most efficient fenders known are a pair of beer bottles (filled with good beer, of course) and a cigar or the price of a couple. The lock tender expects his tip and must get it if you would get the accommodations. It is an exceedingly grouchy lock tender who, after partaking of your refreshments, will not forget his resentment against the motor boats for causing him the extra trouble of locking them through.

In addition to the above get enough good feed bags, or if you feel flush, and want to be sporty, white canvas bags, to reach along nearly the whole of the boat's sides, and before going into the canal, fill them with straw, excelsior, dry grass, etc. Then tie them together at the end and hang over the side. Separate bags may be used, but more trouble will be experienced in handling them. With this fender hung over the sides, you should worry, even if the lock tender does hold his grouch.

It is also advisable to put a man ashore to handle the lines. Make the lines fast to the bitts on the boat and pass the loose end around the bitts on the dock, but don't make fast to them. Take the ends and your man aboard, and, as the water comes in take up the slack. When you pull out let go the end and haul in the line without getting ashore again.

The above described fenders will be found very inexpensive as well as efficient. In fact, so much so that they may be thrown away and new ones got for the next trip, with less trouble than trying to dry and save them.

W. B. MOORES, Newburgh, N. Y.



The beer bottles suggested by Mr. Moores are not shown in the picture, but the feed bags are plainly in evidence.

Tubular Burlap Fenders.

ANY one who has used ordinary fenders in canal locks has been convinced that they are not adequate for the purpose of protecting the boats, unless fenders of unusually large dimensions are used. As a useful expedient we have seen ordinary burlap bags stuffed with hay hung over the side of the boat, and these serve the purpose admirably.

As an improvement on such a makeshift, it will be found that very much better results may be obtained by making long, tubular fenders of burlap, stuffed with hay or straw, or any other like material. The burlap may be purchased at a very small figure—about ten cents a yard, and occupies but little space during the part of the trip when it is not in use. The fenders are easily made by taking two strips of this material, each nearly as long as the boat to which they are to be applied, and first sewing their ends together with a sail needle and manila twine, stuffing these long bags with hay or straw, or the like, and sewing together the longitudinal edges, leaving at intervals of about two feet loops of the twine, by means of which the bags may be suspended from the sides of the boat.

Such fenders will adequately protect the boat, and after the canal trip is finished can be unstuffed and packed away again in a small space.

E. W. MARSHALL, New York City.

Rope Fenders Best.

PROBABLY the best type of fender for a motor boat to use when making a passage through a canal is a fender which will reach nearly the full length of the boat. A fender of this type should be made long enough and be so placed that no part of the boat projects beyond it. For instance, a boat having a large flare forward and a tumble-home aft, should have the fender raised to protect the flare forward and dropped to protect the width aft.

Fenders of the type described below have proven very valuable to the writer during the last two seasons, as they are neat and attractive, as well as being extremely useful.

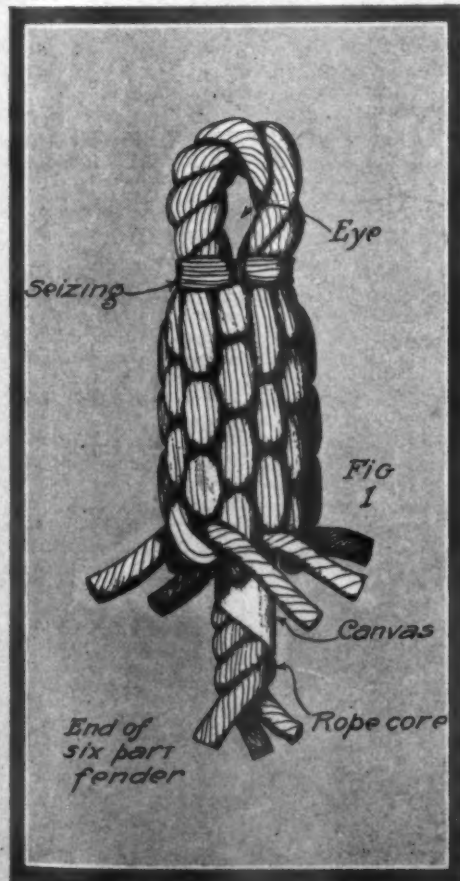
The fenders consist of a core covered with small rope neatly braided. In each end they have an eye, by which they are fastened to the bow and stern of the boat. They are held in place every few feet by a small rope in the form of a pennant, which is passed around the fender and then fastened to a deck cleat or ring bolt.

The outside or covering of the fenders consists of small rope of a diameter ranging between one-quarter and one-half inch. The strands of large rope may also be used as the covering, if their diameter is between the limits stated for the small rope. The core consists of a rope, ground cork, or nearly any soft resilient material wrapped in canvas to prevent its disintegration between three-quarters and one and one-half inches in diameter.

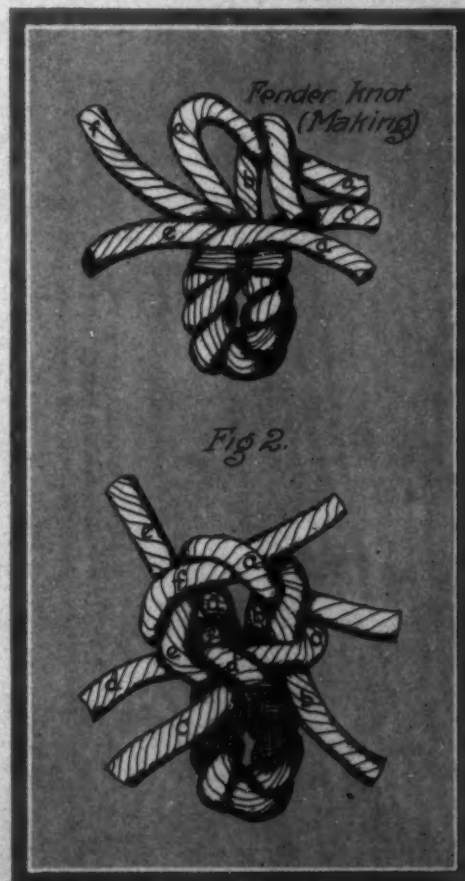
Old rope is very useful in making fenders, as it is generally easy to obtain. Care should be taken however, when selecting old rope, to see that it is free from decayed places and that the fibers are fairly long.

When starting a fender, first decide upon its length when finished and the number of parts which you wish to use for the outside; six or eight are usually the most convenient. If six parts are used cut three pieces of rope seven times the length of the finished fender. If eight parts are used cut four pieces of rope eight times the length of the finished article. Next lay all of the parts together and double them to form an eye, as shown in Fig. 1. This eye should have a marine seizing put below it (Fig. 1), and the core should be fastened to this seizing with a piece of twine. The knot of which the fender is composed is made in the following manner: Take part A and make a loop in it (Fig. 2), then pass part B over part A so that the end of part A will be on the outside of the fender; then take part C and proceed in like manner until part F is reached (in a six-part fender, or part H in an eight-part fender), and pass this part through the loop in A; then pull all parts tight and start on the next knot, which is made in exactly the same manner. The other end of the fender is finished by seizing the parts together with marine.

GEO. CHALKER, Long Beach, Cal.



Type of rope fender favored by Mr. Chalker.



The rope fender in course of construction.



The Series B Scripps Six.

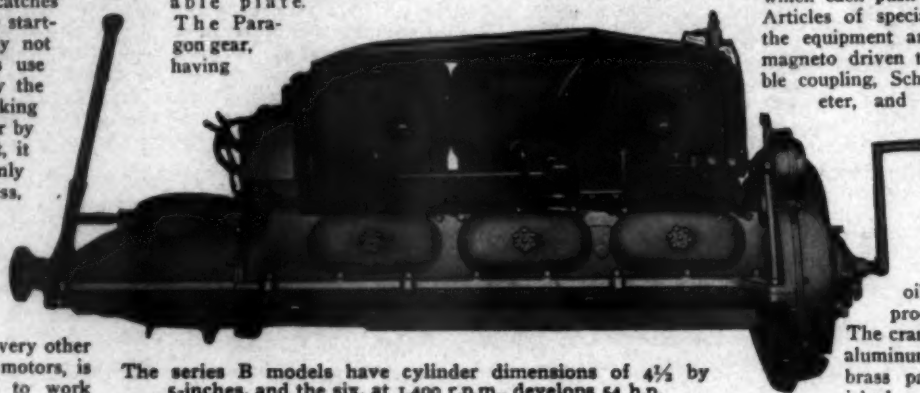
A Quiet-Running Power Plant Which Has Every Moving Part, Including the Flywheel, Enclosed. Fitted with Single-Unit Starting System Having Non-Stallable Features.

THE motor shown in the accompanying illustration is the six-cylinder size of the Series B Scripps, manufactured by the Scripps Motor Co., of Detroit, Mich. Other models in this series are made in two and four cylinders and for medium duty and high-speed service. The thing which first catches the eye with this motor is the starting handle, which is certainly not usual in marine motors. Its use in this instance is dictated by the enclosure of the flywheel, making it impossible to start the motor by the ordinary method. At that, it is included in the equipment only as a measure of preparedness, as the motor is fitted with the dependable Leece-Neve electric starting system, especially adapted for the needs of this power plant.

Not only the flywheel, but every other moving part of the Series B motors, is enclosed, making it possible to work

around the motor in close quarters without the danger of catching the clothing in it. The ignition wires are also enclosed, there being only three inches of each wire as it leaves the spark plug exposed. The wires are accessible at all times, however, through a removable plate.

The Paragon gear, having



The series B models have cylinder dimensions of 4½ by 5-inches, and the six, at 1,400 r.p.m., develops 54 h.p.

central control, is mounted in unit with the motor.

Two features which make for quiet operation of this engine are the helical-cut gears lubricated direct from the mechanical oiler, and the fiber-tipped adjustment screw with which each push rod is fitted. Articles of special interest in the equipment are a Bosch magneto driven through flexible coupling, Schebler carbureter, and Gray-Hawley spent-gas air compressor.

The cylinders are carefully enamelled with special oil- and heat-proof flat enamel. The crankcases are of aluminum bronze; all brass parts are polished.

The Latest Red Wing Thorobred.

Notable Features Include Overhead Valves, Removable Cylinder, Head En Bloc Casting, Etc. Careful Balancing to Permit Speeds of 2,000 R. P. M. Without Excessive Vibration.

THE motor illustrated below is the Model H Red Wing Thorobred, manufactured by the Red Wing Motor Co., of Red Wing, Minn., which embodies such notable features of design as overhead valves, removable cylinder head, and cylinder block and crankcase cast in one. According to the makers, careful design and manufacture under the most rigid system of inspection and final test insure a motor of extreme refinement that is quiet, smooth-running and powerful, with the added very important feature of economy of operation. The use of large overhead valves gives direct inlet and outlet of gases and makes for a very snappy power plant. All reciprocating parts are care-

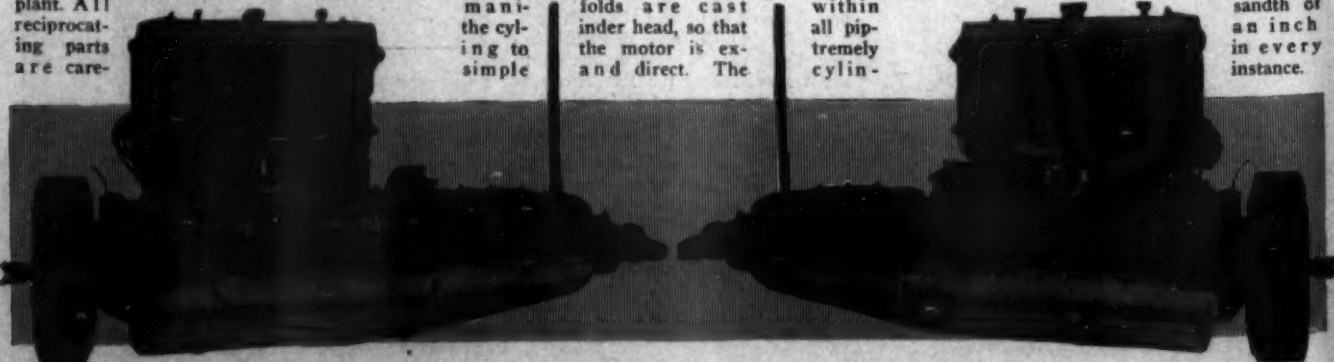
fully balanced so that the motor may be operated at speeds of over 2,000 r.p.m. without excessive vibration.

The bearing areas, water jackets, crankshaft and connecting rods are of liberal design. All moving parts are thoroughly enclosed, making the motor quiet in operation and excluding all chance of dirt getting in and causing wear.

The cylinders are cast in a single block, which, as has been said, includes the upper half of the crankcase, and the removable head not only gives the advantage of easy accessibility to the valves, but makes it possible in the manufacture to machine the entire combustion chamber. The intake and exhaust manifolds are cast in the cylinder head, so that the motor is extremely simple and direct. The

der casting is tested to a water pressure of 250 pounds to the square inch before passing the inspector, and a high factor of safety is maintained in all the details of the motor. The cylinder water jackets are large and entirely surround the combustion chamber.

The crankshaft is of the three-bearing type and is machined and ground from a high-carbon drop forging, heat-treated, and is very carefully balanced. The connecting rods are I-beam drop forgings of deep section, to give absolute rigidity. The camshaft is a one-piece drop forging, heat treated, and the cams, which are integral with the shaft, are hardened and ground to a limit of one-quarter thousandth of an inch in every instance.



Port and starboard views of the Model H Red Wing Thorobred, giving a clear idea of the trim appearance of this motor.

Newest Caille a Four-Cycle Four.

Designed for the Man Whose Motor Knowledge Has Been Gained from the Automobile Motor.
A 14 H. P. Unit Power Plant for the High-Class Tender or Runabout.

THE most recent model to be placed on the market by the Caille Perfection Motor Co., of Detroit, Mich., is the Caille Aristocrat, a four-cycle marine motor developing 14 h.p. at 900 r.p.m. The manufacturers state that in designing this motor they have had in mind especially the needs of the man who is not technically and whose knowledge of engines has been gained from experience with automobiles. To lighten the work the motor the oiling system which requires no attention, engine is equipped with an self-starter.

The four cylinders, whose dimensions are $3\frac{1}{2} \times 4$ are cast en bloc, and of the L type, with the intake and exhaust manifolds on the starboard side. The intake is so arranged that the incoming gases are heated by the exhaust. The spark plugs are mounted over the intake ports, and all wiring is enclosed.

One of the

informed gasoline principally mobile around is of a type and the electric individual inches,

features of this new motor is the lubrication system, which is of a positive and simple type devised by Arthur Caille. The cooling system is also an efficient one, a plunger pump of ample capacity being mounted between the flywheel and the base casting and driven by an eccentric off the camshaft. Quickly removable handhole plates give access to the base of the motor.

The magneto, mounted on an extension of the base on the starboard side, and driven off the cam gear.

is of the Bosch high-tension type. A Schebler Model R carburetor is fitted.

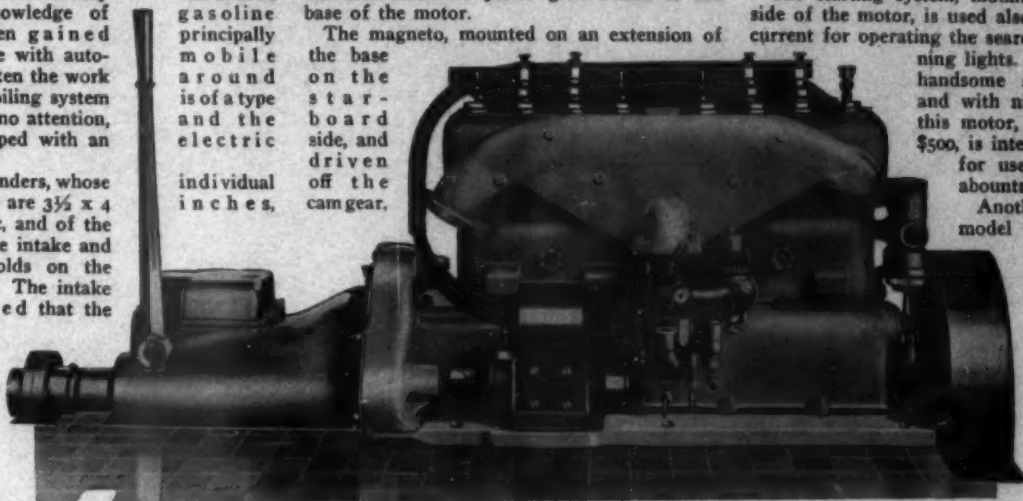
The reverse gear, in unit with the motor, is strong and reliable and is fully enclosed, so that the gears turn in a bath of oil without sharing the liquid with the occupants of the boat.

The starting system, mounted on the port side of the motor, is used also for generating current for operating the searchlight and running lights.

Enameled in a handsome shade of gray, and with nickel trimmings, this motor, which sells for \$500, is intended specifically for use in fast runabouts of high grade.

Another new Caille model is the Bantam,

which develops 2 h.p. and is intended for installation in a rowboat, being capable, it is said, of driving such a craft at the rate of 9 miles per hour without difficulty.



The four-cylinder four-cycle Caille Aristocrat develops 14 h.p. at 900 r.p.m. It is equipped with an electric starting and lighting system.

The 200 H. P. Wolverine.

An Air-Starting Six-Cylinder Oil Engine Which May Also Be Operated on Producer Gas.
Cylinders Cast Separately with Large Water Jackets—Detachable Heads.

THE largest marine motor coming from the factory of the Wolverine Motor Works, Inc., of Bridgeport, Conn., is a six-cylinder, 175-200 h.p., four-cycle machine, with 11-inch bore by 15-inch stroke. Other than its size and power, one of the most distinctive features of this motor is the two-section crankshaft, this member being composed of two three-throw sections which telescope together and are fastened by flanges, bolted together by seven one-inch nickel steel bolts. The material is of the best grade open-hearth steel. Hammer-forged connecting rods of I shape are used, and the pistons are of the trunk pattern, extra long, with five rings above the wrist pin, and one, an oil ring, below.

The cylinders are cast separately with large

water jackets, and the heads are detachable from the cylinders, being light in weight and easily removable. Valve chamber caps are also provided to give easy access to the valves. The water pump is of solid bronze and is fitted with air chambers on both suction and discharge sides. The pump, which runs at half crankshaft speed, drives a continuous non-pulsating flow of water through the large brass pipes of the circulating system. Provision is made for regulating the water flow to each cylinder separately.

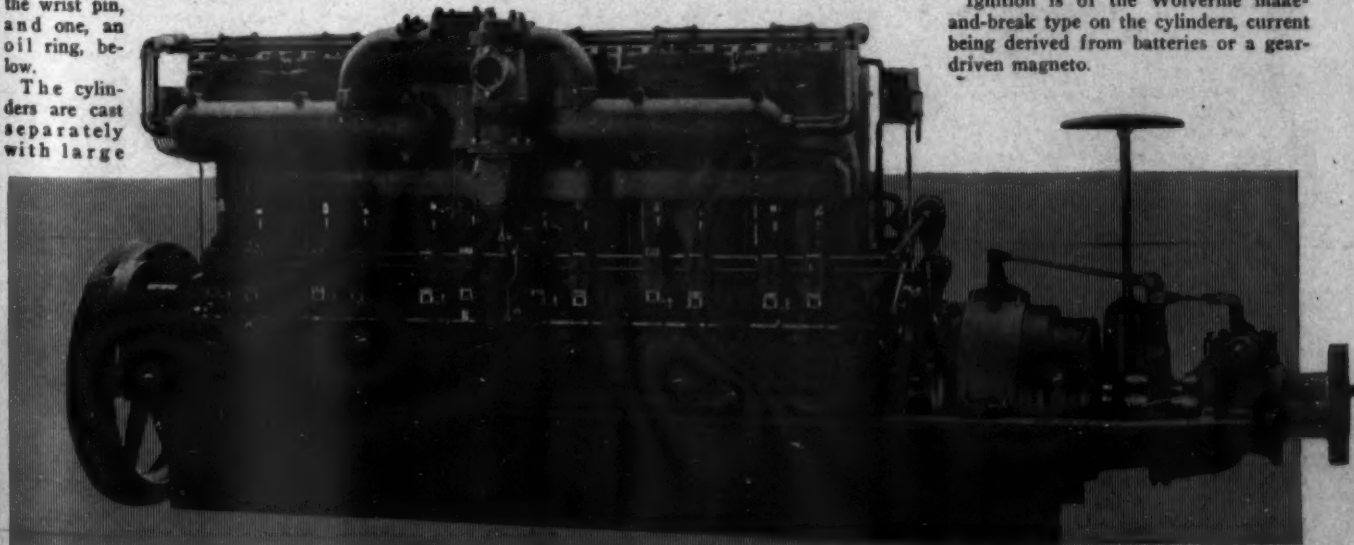
A two-compartment force feed mechanical oiler lubricates the cylinders, pistons, upper and lower connecting rod boxes, main and end

bearings on the crankshaft and the thrust bearing. The crank pin boxes are provided with ring oilers; the camshaft bearings are oiled from gravity feed cups.

The reverse gear is of the bevel type with four gears in all. Two of these are cut from high-carbon manganese steel and the other two from low-carbon steel, case hardened. The thrust bearing is extra large, of the ring type, with the rings running in babbitt.

This motor is fitted with an air starter, the air being admitted to the cylinders through special valves in the heads. When running on producer gas the motor develops 175 h.p., and when oil is the fuel, 200 h.p.

Ignition is of the Wolverine make-and-break type on the cylinders, current being derived from batteries or a gear-driven magneto.

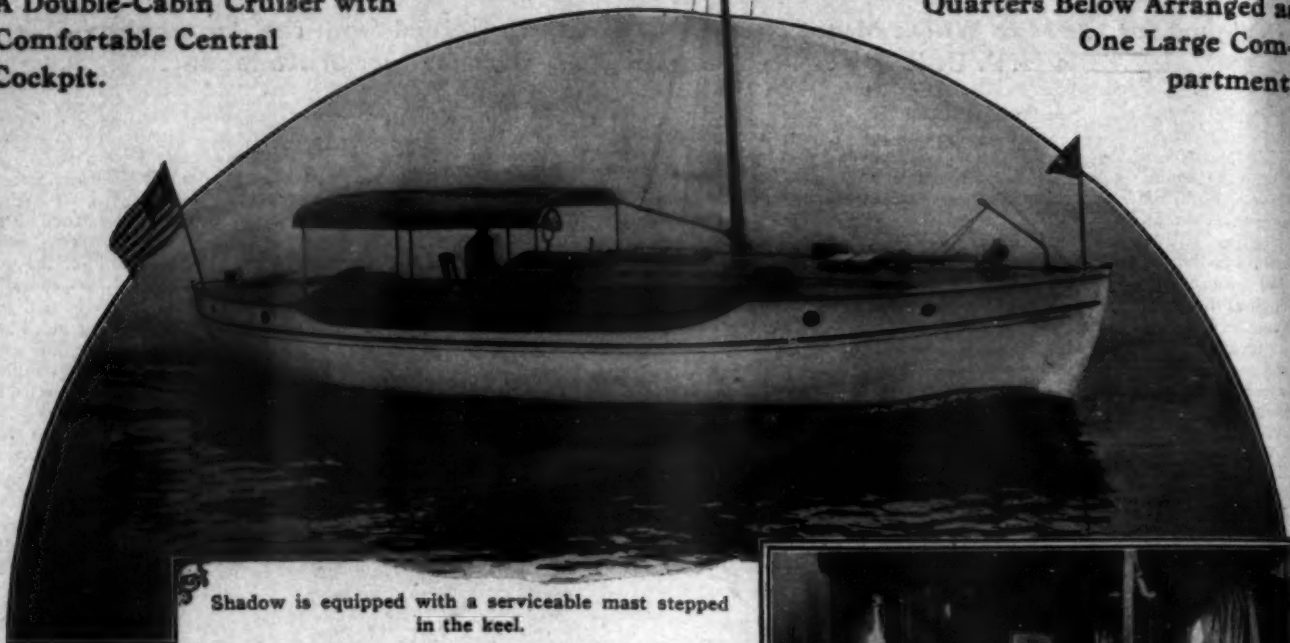


An interesting feature of this 11x15-inch motor is the crankshaft, which is composed of two three-throw sections telescoped and bolted together.

A Roomy New 40-Footer.

A Double-Cabin Cruiser with Comfortable Central Cockpit.

Quarters Below Arranged as One Large Compartment.



Shadow is equipped with a serviceable mast stepped in the keel.

THE accompanying illustrations show the new cruiser Shadow, designed by William J. Deed, Jr., of Boston, Mass., and built by William Haff, of New Rochelle, N. Y., for Dr. J. C. Ayer, of Glen Cove, L. I. In Shadow's general arrangement no space has been taken up by partitions, the engine-room and main cabin being thrown into one. Forward of the cabin, however, separated by a door, is the toilet and washroom, which takes up the

after bulkhead. The motor installed is a three-cylinder 21 h.p. Clifton, having cylinder dimensions of $6\frac{1}{4} \times 7$ inches, and this outfit drives the boat at a maximum of ten miles per hour.

The raised deck forward merges with the trunk cabin over the engine-room (or the galley), and aft of this is the cockpit with a raised bridge on the



The 21 h.p. Clifton motor, located in the combined engine-room and galley, gives a speed of 10 miles.



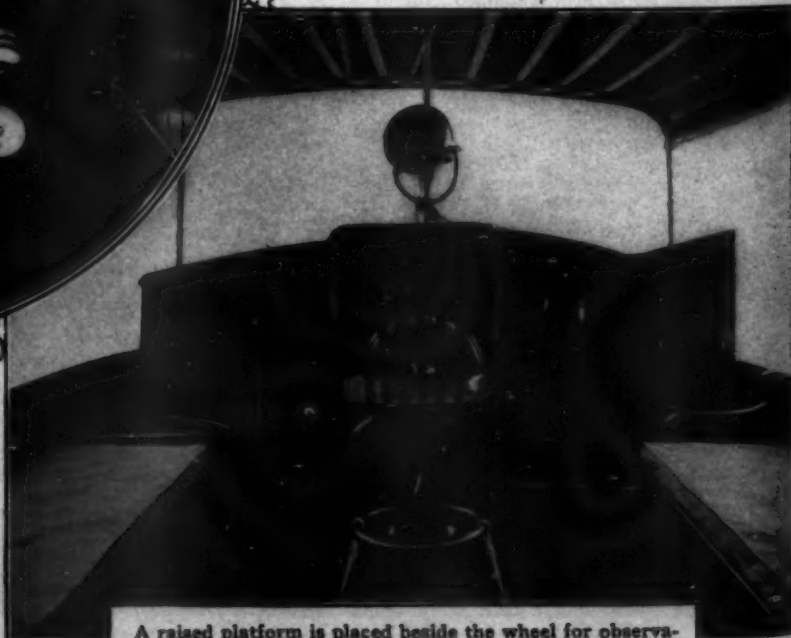
The quarters below are especially commodious for a boat of this length.

space immediately aft that occupied by the water tank and chain locker.

At the forward end of the two extension berths in the cabin are situated clothes lockers, and space for stowage of blankets, etc., is found under the berths. Just whether the compartment aft of the cabin is the engine-room or the galley is not quite clear, but as a galley it is very conveniently arranged, with the three-burner stove and the sink on the port hand, and the ice box and food locker to starboard. As an engine-room it is equally noteworthy being arranged with ample space for working around the motor, and with switchboard attached to the

port hand for the helmsman. Under the cockpit are located two 75-gallon gasoline tanks. The boat measures 39 feet $11\frac{1}{4}$ inches by 9 feet 2 inches beam.

Photographs by Levick

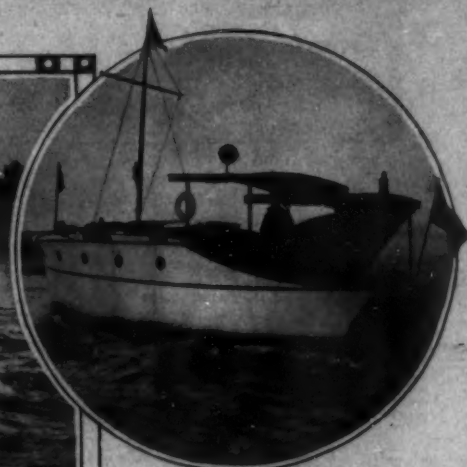


A raised platform is placed beside the wheel for observation purposes.

Fast Cruisers Race to Block Island.



The start of the Block Island race was as exciting as you're likely to see in an event of this nature, as Flyaway III, Romany and Satsun just missed striking one another.



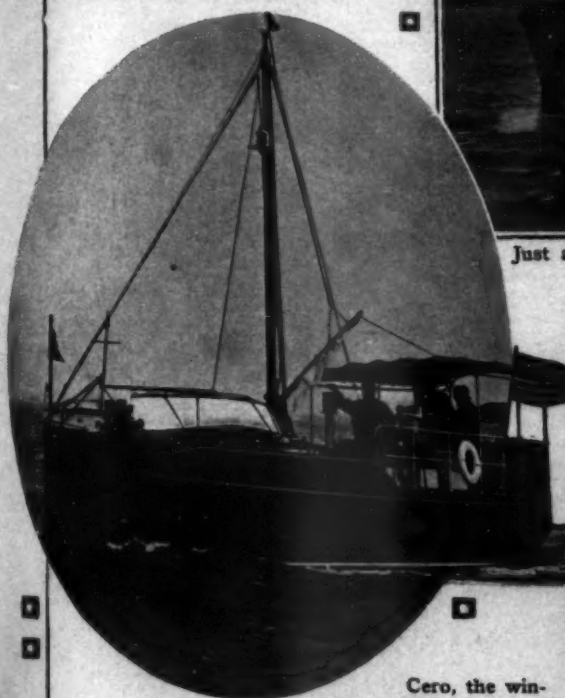
Satsun, a 30-footer, owned by Thomas Farmer, Jr.



Houp-la, coming and going. This boat is owned by Harold Wesson and is powered with a Sterling motor.



Just after the gun. Satsun leading for a moment, Flyaway III taking the lead and Cero, the leader at the finish.



Cero, the winner on corrected time. This boat was designed and built by Luders for this year's Bermuda race and there is no question as to her ability to "get there."



Official Time and Measurements of All Contestants in the N. Y. A. C.'s Annual Race to Block Island, 100 Nautical Miles, June 26, 1915.

BOAT	OWNER	L.O.A.	L.W.L.	B.O.A.	B.W.L.	DEPTH "C"	M.S.	MOTOR	BORE & NO. OF STROKE CYLS.	R.P.M.	H.P.	RATING	ELAPSED TIME	CORRECTED TIME
Cero	W. P. Frost	39.83	39.38	9.625	8.875	1.875	18.84	Mianus	6x8	2	400	15.08	12:07:00	4:44:02
Intrepid	H. F. Rudinger	36.125	31.85	10.167	8.917	1.313	11.703	Rainco	5 x7	2	470	19.7865	12:40:00	5:18:08
Flyaway III	F. L. Upjohn	37.92	37.83	9.30	7.80	.998	7.55	Van Blerck	5 1/2 x6	6	1100	78.488	5:40:20	5:24:59
Satsun	T. Farmer, Jr.	30.90	28.55	8.46	7.80	1.23	9.394	Lamb	4 1/2 x6 3/4	2	600	10.73	12:47:10	5:38:06
Romany	M. S. Duell	49.97	49.76	9.95	8.697	9.56	8.334	Van Blerck	5 1/2 x6	8	900	85.54	7:00:18	7:00:18
Houp-la	Harold Wesson	39.97	39.50	8.987	7.437	.75	5.577	Sterling	8 1/2 x6 3/4	8	1150	122.96	8:00:30	8:04:38
W. E. T.	W. E. Thomas	38.917	38.292	9.33	8.33	1.146	8.548	Wisconsin	5.2x7	8	900	66.879	Did not start	

Time Prize won by Flyaway III. Corrected Time Prize won by Cero.
Previous record (10-10-00) established by Thistle in 1914.
New record (5-40-20) established by Flyaway III.

From Motor Boating Readers

This department of MoToR Boating is maintained for the purpose of giving its readers opportunity to ask questions, reply to other correspondents' communications and submit ideas, suggestions, opinions or experiences which may be of interest and assistance to motor boatmen. There are no rules governing the department other than that postage must be enclosed when an answer by mail is desired, and that the name and address of the writer must be given in each instance. No anonymous contributions will be considered for publication, but initials or a pseudonym will be substituted for the writer's own name if the request be made. The editor does not, of course, hold himself responsible for statements made or opinions expressed by contributors to this department.

The Question of Flags Up Again.

To the Editor of MoToR Boating:

I note in a recent number of MoToR Boating that many men will deliver lectures and talks on topics of interest to yachtsmen, and I am intruding on your valuable time to suggest that some one say a few emphatic words on the proper use of flags.

You have several times published plain instructions in MoToR Boating, but many yachtsmen, near-yachtsmen, and (greatest offenders) paid yacht officers with (presumably) certificates, sail throughout the summer using flags in improper ways.

Among yachtsmen and near-yachtsmen the most usual offense is flying the Union Jack at the bow every day instead of on Sundays and holidays only, and then at anchor.

With the paid sailing masters the common practice is to go cruising about with the absent flag and meal pennants flying.

J. R. T. M. D.

Sag Harbor Yacht Club.

[We are aware that there are a great many breaches in yachting etiquette and the flying of flags, and these very often by persons who should know better. We are constantly writing letters on this point, and, as you say, have had numerous articles from time to time. If any of our readers could suggest any more emphatic way of driving this point home, we certainly should like to hear it. We give herewith a simple chart showing the proper flags to fly on the different types of boats, where these should be flown and when to fly them.]

Weight of Flywheel.

To the Editor of MoToR Boating:

As an old subscriber and present reader of your magazine, I would like to know the approximate weight of flywheel for the following motor:

Four-cylinder, two-cycle, three-port; bore, 4 3/4 inches; stroke, 4 1/2 inches; 40 h.p. at 1,000 r.p.m.; intake diameter, 1 1/2 inches; exhaust, 2 inches; crankshaft, 1 3/4 inches. The engine is a light-weight, high-speed motor, with aluminum crankcase, water jackets and manifolds, and fires in the following order—1, 2, 4, 3. It is installed in a 13-foot monoplane with an 18 by 28 inch propeller having three full elliptical blades.

B. A. M.,

Detroit, Mich.

[You have neglected to give us the diameter which you desire to make it. Upon this factor, in addition to the revolutions at which you are going to run your motor, depends the proper weight.

However, for a 40 h.p. motor turning at 1,000 r.p.m., the approximate weight may be determined by the following formula:

$$W = \frac{3000}{d^2}$$

W = The weight of the rim of the flywheel in pounds.

D = Diameter of the flywheel at the center of gravity of the rim, expressed in inches.

From the above, we believe you can work out the proper weight for the flywheel of your motor. We would suggest, however, that you make it slightly heavier than you think it should be, and try it out on your motor. If the latter does not come up to the desired number of revolutions per minute, it is an easy matter to take a little weight off the rim of the flywheel.]

English craft: Fore-and-aft rig is essentially an American rig and did not exist in England in those days.

The man-o-war sailor's cap of the present day is an evolution of the French fisherman's cap, and was first adopted in its present form by the French navy, but the flat top or a top expanded by a ring pad is essentially American, the American navy being the only navy using it, and it used to be made with a large fancy ten-point star on top (now, I believe, omitted). I remember when the sailors wore tarpaulin—a hat made out of Manila cloth, pleated and sewed by the wearer and then painted or coated with tar.

Second, the trousers: In Drake's day and time the sailors all wore loose-legged trousers to just below the knee, but the trousers of today are a combination of science and vanity. The scientific part is that they should be made to fit tight around the hips and thighs to about six inches above the knee, then begin to open or loosen out, the object being that when a man was running up the rigging or ratlines it left the knees entirely free to bend inside of the trousers leg, and by having the rest of the leg loose there was no possibility of them binding or clinging to the man's legs when he was lying over a yardarm reefing or furling sails. The vanity part consists in the width at the bottom, the general rule among sailors being to have them so that when they are doubled they will pull out even with the toe of the shoe, thereby giving the appearance of a rather small foot. The average Jack Tar is just a little vain in that regard. The lacing at the back of the trousers is used in place of a belt, as the trousers will stretch and get loose, and, in the days of masts, yards and sails, a man had to have them tight to enable him to get aloft quick.

Third, the collar—It is true that the collar is a relic of the old pigtail days, but it was not fast to the shirt then. It was worn only in connection with the pea or monkey jacket on the outside of it to keep it clean from the pigtail. The stripes on the collar is an American idea to designate the wearer's rank or rating. One stripe, boy or landsman; two stripes, ordinary seaman; three stripes, able seaman. But I believe at the present time all ranks wear three stripes. While I am talking about shirts, I should like to add that the American man-o-war's man is the only one in the world that wears a shirt. All the others are jumpers, i. e., pull in around the waist with a drawstring. Also the American shirt collar used to have a star worked in each lower corner, but I believe that has also been abolished.

Mr. Editor, I hope you will not think that I am trying to start any quarrel with Mr. Demling or intending a any insinuations concerning his knowledge. I am only trying to explain what I know and what I learned during my service in the U. S. Navy before, during and after the Civil War.

With apologies to yourself and Mr. Demling, I am,

CAPT. D. G. PRICE,
Deweyville, Texas.

FLAG	WHEN FLOWN	OPEN BOATS WITH BOW & STERN SIGNAL MASTS	BOATS WITH SIGNAL MASTS	AUXILIARY SLOOPS	AUXILIARY AND BOATS WITH TWO MASTS	AUXILIARY YAWLS	DINGHIES
ENSIGN	DAY to Sundown	Stern	Stern	Stern at anchor, off end or stern when under way	Stern at anchor, off end or stern when under way	Mizzen Mast head	Stern when at gangway or away from yacht
CLUB PENNANT	DAY to Sundown	Bow when at anchor	Bow	Mast head when at anchor	Fore mast head	Main mast head when at anchor	At bow when club member and all crew is aboard
PRIVATE SIGNAL	DAY to Sundown	Bow when under way	Mast head	Masthead when under way	Main mast head	Main mast head when under way	At bow when owner is aboard
FLAG OFFICERS	Day and Night		Mast head	Mast head	Main mast head	Main mast head	At bow when owner is a Flag officer and on board
UNION JACK	Sundays and Holidays DAY to Sundown When at anchor only	In place of club pennant	In place of club pennant		Bow staff		
NIGHT PENNANT	Sundown to DAY		Mast head	Mast head	Main mast head	Main mast head	
ABSENT FLAG	From daylight to dark during absence of owner from yacht		Starboard yard arm or spreader	Starboard yard arm or spreader	Starboard main spreader	Starboard main spreader	
MEAL FLAG	During meal hours of owner during daylight when at anchor		Starboard yard arm or spreader	Starboard yard arm or spreader	Starboard main spreader	Starboard main spreader	
CREWS MEAL FLAG	During meal hours of crew when at anchor		Port yard arm or spreader	Port fore spreader	Port fore spreader	Port fore spreader	
WATER FLAG	Displayed during daylight - from	any part of the yacht					
QUEST FLAG			Starboard yard arm	Starboard yard arm	Starboard main spreader	Starboard main spreader	

③ An auxiliary yawl may also be considered a schooner and flags displayed as on latter vessel

Chart showing the proper place to fly the various flags and when they should be flown.



A motor-car ferryboat which makes 8 miles per hour.

At the inner ends of the paddle shafts are wooden drums connected by belt to the car driving wheels, these being jacked up from the floor. The steering wheel is placed to the right of the car operator within easy reach of his hand. C. W. Houtari, of Aberdeen, Wash., is the inventor, and his barge which he uses to convey his car and himself across a 20-mile stretch of water, cost less than \$100.

The Togs We All Wear.

To the Editor of MoToR Boating:

I notice in my April number of MoToR Boating an article by A. L. Demling entitled "Togs We Sailors Wear," and, beg your permission to comment on it.

First, the cap, which he claims to be a "hand-me-down from the days of fore-and-aft-rigged clippers"—will he please explain what is a fore-and-aft-rigged clipper? He furthermore makes it appear to be an

Wish you would please let the writer know about what size propeller and number of blades to be used on a motor boat twenty-one feet long, six and one-half feet wide, two-cylinder, two-cycle, twenty-two horse power automobile engine. The speed of the shaft is fifteen hundred.

[We would recommend one having three blades 14 inches in diameter by 14 inch pitch, which should give you the best results for a 22 h.p. motor, at 1500 r.p.m.]

What Propeller?

To the Editor of MoToR Boating:

Among the Clubs



A busy hour at the club float.

Maumee River Yacht Club Celebrates.

The Maumee River Yacht Club, of Toledo, Ohio, headed by Commodore Percy C. Jones, took a very prominent part in Toledo's first Peace day which was celebrated on July 5. In the evening a water carnival was staged by the yacht club, which is reported to have been the most gorgeous and beautiful ever held in this country. It is estimated that at least 8,000 persons gathered in the vicinity of the Maumee River Yacht Club to view the big spectacle, and the thanks of the entire city were extended to Commodore Jones and his assistants for the remarkable manner in which they managed the whole affair. In addition to the water carnival, a magnificent display of fire works was set off at a point near the yacht club, and in the land parade the members of the club had a float bearing the inscription "Every Country has its Flag, but We are here for the Star-Spangled Banner and Everlasting Peace."

Red Bank Races.

The Red Bank Motor Boat Club, whose club house is located on the Shrewsbury River at Red Bank, N. J., held its fifth annual motor boat regatta this year on July 5th. Although the number of starters was somewhat smaller than in former years, due to unfavorable weather conditions, yet there were some close finishes and lively competition.

The method of handicapping adopted by the Red Bank Motor Boat Club was based on actual running times of each of the boats, taken by the committee prior to the race. This method proved to be a very satisfactory one, although several boats had to be disqualified in one class on account

of the boats exceeding their trial performances in the race by more than 5 per cent.

In Class A, for open and cabin boats of any length, the course was 6 miles in length, and Jessy M. owned by A. J. Biller proved the winner on corrected time. Mohawk, owned by E. Perine, took second place and Muir Maid, owned by P. A. Proel, made the fastest time in the race, covering the 6 miles in 19 minutes, 50 seconds. In Class B, a ten mile handicap for speed boats, the prize went to Jack Tarr, owned by J. P. Andrews. Rufus, owned by T. Hunting, was second. In Class C, a free-for-all scratch race of 14 miles in length, Baby Ro, owned by J. F. Betts, covered the course in 33 minutes, 4 seconds, winning first place. Otjaidai, owned by the same owner, was second, in 34 minutes, 12 seconds.

New Yacht Club Organized at Balboa.

A new yacht club by the name of the Balboa Yacht Club has recently been organized at the Pacific terminal of the Panama Canal, with 130 members, and the following officers have been elected: Commodore, Commander Butler, U. S. N.; Vice-Commodore, C. A. McIlvaine; Rear Commodore, John A. Walker; Secretary, J. R. Ringman; Treasurer, Tom Booz; Fleet Captain, E. F. Brown; Fleet Surgeon, Col. C. F. Mason. A valuable building was given to this club for a club house, and an anchorage has been authorized by the canal officials.

Red Wing Yacht Club Cruises to Hannibal.



Mary Jane, owned by J. M. Rowland of the Holley Beach Yacht Club, winner of the five-nautical-mile race for open boats rating over 50 in the S. J. Y. R. A. races at the Holly Beach Yacht Club.

The race committee of the Red Bank Motor Boat Club—Fleet Capt. Morrow with the watch; Capt. Wood with the time sheet and J. P. Andrews holding the megaphone.

The Red Wing Yacht Club, headed by Commodore Arthur L. Gibson, cruised from Red Wing, Minn., to Hannibal, Mo., in squadron formation for the annual regatta of the Mississippi Valley Power Boat Association, held at Hannibal, July 5-7, 1915. The fleet cruised in two divisions, one being laid out for slow boats, and the other for faster craft. The former division left St. Paul on June 27th, making night stops at Red Wing, Minn., Winona, Minn., Lansing, Dubuque, Clinton, Muscatine, Ia., and Fort Madison, arriving at Hannibal on the evening of July 4th. The faster boats left St. Paul at 7 a. m., on July 1st, making a 144 mile run to La Crosse, Wis., where the night was spent.

The next day took these boats to Dubuque, Ia., after a run of 120 miles, the third day to Muscatine, a distance of 125 miles, and the fourth day, 150 miles to Hannibal.

Mill Creek Yacht Club Welcomes Yachtsmen.

The Mill Creek Yacht Club, located on Flatlands Bay, New York City, at the foot of Flatbush Ave., has extended a hearty invitation to all yachtsmen on a cruise to visit their club house and anchorage, and assures them of a most hospitable time during their stay. This club, which is one of the best on the whole of Jamaica Bay, has deep water at all tides, and the anchorage is one of the safest to be found in these waters. H. H. Kuhn is Commodore of the Mill Creek Yacht Club, W. E. Peckam, Vice-Commodore; J. Schlott, Rear Commodore; P. Schwartzing, Fleet Captain; J. H. Mahnken, Treasurer, and P. Fisher, Financial Secretary. Vice-Commodore Peckam is acting as secretary.

Milwaukee Yacht Club Program.

The Milwaukee Yacht Club, of Milwaukee, Wis., has issued a very attractive program of the season's activities, and includes yachting events of every kind, and from the present indications, it appears this club is having one of the most active seasons in its career. This club is now in its 21st year, and with its growing membership, prospects are very encouraging for future. The club house is located in a beautiful city park and has a snug harbor for all types of yachts and is easily accessible from the city.

Ocean City Yacht Club Regatta.

The regatta committee of the Ocean City Yacht Club, headed by Chairman Frank J. Gorman, held a very successful series of races off their club house, at Ocean City, on July 5th, the classes being arranged for a one-design class and also for cruisers. The one-design class race, over a six-nautical-mile course, was won by Miss Lulu, owned by Bassett & Fite, and Ruth B. owned by Jacob Beiswanger, was second. In the cruiser race, Kismet, owned by Frank J. Gorman, took first prize, and Marym, owned by Richard Nelms, was second, being only one minute and thirty-three seconds behind the winner.

Commodore Wallace Presents Trophy.

Commodore Wallace, of the New York Athletic Club, has presented a valuable trophy to the Long Island Sound Section of the A. P. B. A., to be raced for by cruisers under 30 feet in length, and rating 22 or over, according to the A. P. B. A. rules. The conditions of this race will be radically different from anything ever attempted in any other race ever held, the idea being to test the owner's skill as a navigator in addition to putting a premium upon good design of hull and power plant. The question of seamanship will also largely enter into the winning of this trophy. The system of handicapping adopted by the regatta committee of Long Island Sound Motor Boat Association provides for a combination of rating handicaps, the actual performances and the owner's declaration of the time that he will be at several stated points along the route. Each owner will be required to give to the regatta committee prior to the start of the race a schedule stating the time he expects to land and depart from each station. One half hour must be spent at each reporting station. Penalties will be inflicted for variation in rate of speed between stations, and for a variation from the schedule declared by each contestant, the penalties being deducted from the handicap as figured from the A. P. B. A. rules.

The race for the Wallace Trophy will be open to members of any club belonging to the American Power Boat Association, and the start will be from the Stamford Yacht Club, on Saturday, Sept. 10th. Boats will be obliged to call at New Rochelle, Manhasset Bay, Huntington, Port Jefferson, New Haven and Bridgeport, the race finishing at the starting point at Stamford.

Calendar of Big Racing Events.

(NOTE: This page will be a regular feature of MoToR BoatinG during the racing season, and to make it of the utmost value to our readers it is hoped that the chairmen of regatta committees or corresponding secretaries of the various clubs will send us the conditions of their more important events as they are scheduled. The RESULTS will also be featured, and, to the end that we may have a full record, we should like to be informed of the name, owner, make of engine, power, overall length, and actual time of the winning boats, as well as of the length of course and of any other details which may be of interest.)

Aug. 6. Annual Regatta of the Lake Champlain Yacht Club, at Burlington, Vermont. M. C. Reynolds, Sec'y, Burlington, Vt.

Aug. 7. Annual Race of the Shattismus Yacht & Canoe Club, Ossining, N. Y. Charles W. Freen, Secretary, 45 Ellis Place, Ossining, N. Y.

Aug. 7. Sea Isle Yacht Club. Races of the Racing Association of South Jersey Yacht Clubs, Sanctioned by A. P. B. A., and open to boats from any recognized club. Charles J. Curran, Chairman, R. A. S. J. Y. C., 2736 North Broad St., Philadelphia.

Aug. 13. Race for the Commodore's Cup of the Sunset Yacht Club, Long Beach, Cal. Francis Hay, Secretary, 233 Central Building, Los Angeles, Cal.

Aug. 14-16-17. Gold Challenge Cup Races of the American Power Boat Association, Manhasset Bay, Long Island Sound. Open to all boats of 40 feet and under for the One-Mile Championship of North America. Albert L. Judson, Secretary, A. P. B. A., The Plaza, 5th Ave. and 59th St., New York.

Aug. 14. Cleveland Yacht Club Race to Vermilion, Cleveland, O. F. O. Van Sickle, Secretary, Box 57, Rocky River, Ohio.

Aug. 14. Race for the Virginia Cup, Sunset Yacht Club, Long Beach, Cal. Francis Hay, Secretary, 233 Central Building, Los Angeles, Cal.

Aug. 14-15. Long Distance Race from Grandview-on-Hudson to Hudson and return, under auspices of Tappan Sea Y. C. W. H. Aspinwall, Sec., Piermont, N. Y.

Aug. 14. Corinthian Yacht Club of Cape May. Races of the Racing Association of South Jersey Yacht Clubs, Sanctioned by A. P. B. A., and open to boats from any recognized club. Charles J. Curran, Chairman, R. A. S. J. Y. C., 2736 North Broad St., Philadelphia.

Aug. 14. Speed Boat Races of the Flat Rock Motor Boat Club, Lafayette, Pa. George W. Sands, Secretary, 415 Monastery St., Roxborough, Pa.

Aug. 15. Races for the Examiner Cup and the Chamber of Commerce Cup, Sunset Yacht Club, Long Beach, Cal. Mr. Francis Hay, Secretary, 233 Central Building, Los Angeles, Cal.

Aug. 15. Colonial Yacht Club Race Around Manhattan Island, Colonial Yacht Club, N. Y. City. W. R. Gray, Secretary, 123 West 125th St., N. Y. City.

Aug. 16. Philadelphia Record Trophy Cruiser Race, Riverside Yacht Club to Ship John Light and return. E. C. Headley, Chairman Regatta Committee, 600 Bullitt Bldg., Philadelphia, Pa.

Aug. 21. Races of the Trenton Yacht Club, Trenton, N. J.

Aug. 21. Stone Harbor Yacht Club. Races of the Racing Association of the South Jersey Yacht Clubs, Sanctioned by A. P. B. A., and open to boats from any recognized club. Charles J. Curran, Chairman, R. A. S. J. Y. C., 2736 North Broad St., Philadelphia.

Aug. 22. Race Around Staten Island, under auspices of Jamaica Bay Y. R. A. Open event.

Aug. 22. Annual Cruiser Race of the Pacific Motor Boat Club. C. Willard Evans, Sec., Belvedere, Cal.

Aug. 23. Avalon Yacht & Motor Club. Races of the Racing Association of South Jersey Yacht Clubs, Sanctioned by A. P. B. A., and open to boats from any recognized club. Charles J. Curran, Chairman, R. A. S. J. Y. C., 2736 N. Broad St., Philadelphia.

Aug. 23. Return Race from Santa Cruz, Sunset Yacht Club, Long Beach, Cal. Francis Hay, Secretary, 233 Central Building, Los Angeles, Cal.

Aug. 23. Handicap Open Boat Championship of the Delaware River. Start and finish at Keystone Yacht Club; course, Bridesburg to Torresdale and return. Surveyed by Delaware River Yacht Racing Association. Race sanctioned by A. P. B. A., and open to members of any recognized club.

Aug. 23-26-27. Annual Chicago Carnival. Series of speedboat races for the Wrigley Trophy.

Sept. 4. Cruise of the Delaware River Yacht Racing Association. E. C. Headley, Chairman Regatta Committee, 600 Bullitt Bldg., Philadelphia, Pa.

Sept. 4. Final Races of the Racing Association of South Jersey Yacht Clubs, at or over the course of the Ocean City Yacht Club. Open to contestants in the previous races of the South Jersey Association. Sanctioned by A. P. B. A.

Sept. 4-5-6. Annual Races of the Seattle Yacht Club at Venice, Seattle Yacht Club, Seattle, Wash. Dr. A. F. Comings, Secretary, 421 Hinckley Building, Seattle, Wash.

Sept. 5. Annual Long Distance Handicap Cruiser Championship of the Pacific Coast, for the Standard Gas Engine Trophy. Sanctioned by A. P. B. A. I. H. Cory, 457 Mills Bldg., San Francisco, Cal., Chairman California Section.

Sept. 6. Annual Races, Riverside Boat Club of Depue, Ill., Lake Depue.

Sept. 6. Annual Regatta of the Hudson River Yacht Racing Association. William H. Frank, President, Poughkeepsie, N. Y.

Sept. 10. Long Distance Consistency Race of L. I. S. M. B. A. for the Wallace Cup, starting from the Stamford Yacht Club. T. B. Taylor, Chairman, 7 East 42nd St., New York City.

Sept. 12. Annual Regatta of the California Section of the American Power Boat Association—Corinthian Yacht Club of San Francisco. I. H. Cory, Chairman, California Section A. P. B. A., 457 Mills Bldg., San Francisco, Cal.

Sept. 13. Annual Fall Regatta of the Columbia Yacht Club, New York. Open only to boats of the Columbia Yacht Club.

Sept. 13. Cruiser Race for the du Pont Trophy, Camden Motor Boat Club. Joseph F. Magee, Secretary, 335 North Second St., Camden, N. J.

Sept. 25. Philadelphia Record Trophy Speed Boat Race, Camden to Torresdale. Start and finish at the Riverton Yacht Club, Riverton, Pa. E. C. Headley, Chairman Regatta Committee, 600 Bullitt Bldg., Philadelphia, Pa.

Sept. 26. Races of the Pacific Motor Boat Club, Belvedere, Cal. C. Willard Evans, Secretary, 187 Fremont St., San Francisco, Cal.

Oct. 1. Start of New York to San Francisco Motor

Boat Race. Held under the auspices of the Panama-Pacific International Exposition. Sanctioned by A. P. B. A., and open to boats between 55 and 100 feet waterline length. Total distance, 5,730 nautical miles. Thos. D. Bowes, Chairman Eastern Committee, 323 Lafayette Bldg., Philadelphia.

Oct. 16-17-23-24-30-31. Races at the Panama-Pacific International Exposition. Sanctioned by A. P. B. A. I. H. Cory, Chairman, California Section of the A. P. B. A., 457 Mills Bldg., San Francisco, Cal.

Summary of Important Races.

Official Results, M. V. P. B. A. at Hannibal, Mo., July 5-7, 1915

CLASS A—5 MILES.

Boat	Owner and Address	Elapsed 1st Heat	Time 2d Heat	Miles per Hour 1st Heat	2d Heat
Hazel	W. J. Woepking, St. Louis, Mo.	11-46	D.N.S.	25.4	...
*Panama	E. D. Scofield, St. Paul, Minn.	13-28	13-38	22.3	22.6
Hummer III	Peter Lange, Hannibal, Mo.	13-42	13-49	21.9	21.6

CLASS B—5 MILES.

Boat	Owner and Address	Elapsed 1st Heat	Time 2d Heat	Miles per Hour 1st Heat	2d Heat
*F. D. Q. V.	A. C. Strong, Burlington, Ia.	9-09	9-10	32.8	32.8
Hummer III	Peter Lange, Hannibal, Mo.	14-04	15-48	21.3	19.0
Hazel	W. J. Woepking, St. Louis, Mo.	11-43	D.N.S.	25.6	...
Panama	E. D. Scofield, St. Paul, Minn.	13-23	13-31	22.4	22.2
Ugly Duckling III	Harry Godley, Davenport, Ia.	11-35	D.N.S.	25.9	...
Baby Wisconsin	Charles N. John, Milwaukee, Wis.	D.N.F.	10-12	...	29.4

CLASS C—10 MILES.

Boat	Owner and Address	Elapsed 1st Heat	Time 2d Heat	Miles per Hour 1st Heat	2d Heat
*Ugly Duckling IV	Harry Godley, Davenport, Ia.	16-31	18-38	36.25	32.2
F. D. Q. V.	A. C. Strong, Burlington, Ia.	15-23	27-54	32.6	21.5
Ugly Duckling III	Harry Godley, Davenport, Ia.	D.N.F.	D.N.S.	...	...
Baby Wisconsin	Charles N. John, Milwaukee, Wis.	D.N.S.	28-15	...	22.8
Hazel	W. J. Woepking, St. Louis, Mo.	D.N.S.	24-50	...	24.1
Hummer III	Peter Lange, Hannibal, Mo.	D.N.S.	27-23	...	21.9

CLASS D—15 MILES.

Boat	Owner and Address	Elapsed 1st Heat	Time 2d Heat	Miles per Hour 1st Heat	2d Heat
Ugly Duckling IV	Harry Godley, Davenport, Ia.	24-48	36-25	...	...
*Dodger IV	Evers & Padgett, Quincy, Ill.	26-07	27-09	34.5	33.1
P. D. Q. V.	A. C. Strong, Burlington, Ia.	23-03	27-38	32.1	32.6
Billiken	W. T. Warren, Chicago, Ill.	D.N.F.	D.N.S.	...	...
Baby Wisconsin	C. N. John, Milwaukee, Wis.	D.N.F.	D.N.S.	...	...

WEBB TROPHY—25 MILES.

Boat	Owner and Address	Elapsed 1st Heat	Time 2d Heat	Miles per Hour 1st Heat	2d Heat
Buffalo Courier	W. J. Connors, Buffalo, N. Y.	41-23	42-30	36.3	35.4
*Buffalo Enquirer	W. J. Connors, Buffalo, N. Y.	41-21	42-37	36.3	35.4
Barnacle	Adam F. Weckler, Chicago, Ill.	D.N.F.	D.N.S.	...	...
Dodger	Evers & Padgett, Quincy, Ill.	51-50	D.N.F.	28.8	...

ADMIRAL'S TROPHY—10 MILES.

Boat	Owner and Address	Elapsed 1st Heat	Time 2d Heat	Miles per Hour 1st Heat	2d Heat
*Ugly Duckling IV	Harry Godley, Davenport, Ia.	16-57	D.N.F.	35.3	...
Mark Twain	Judson H. Boghton, St. Louis, Mo.	16-27	D.N.S.	37.0	...
Dodger	Evers & Padgett, Quincy, Ill.	17-40	19-41	33.95	36.4
Ugly Duckling III	Harry Godley, Davenport, Ia.	24-06	D.N.S.	34.9	...
Hummer	Peter Lange, Hannibal, Mo.	26-29	29-13	32.6	29.5
F. D. Q. V.	A. C. Strong, Burlington, Ia.	33-52	D.N.F.	25.1	...

FREE-FOR-ALL—20 MILES.

Boat	Owner and Address	Elapsed 1st Heat	Time 2d Heat	Miles per Hour 1st Heat	2d Heat
Buffalo Courier	W. J. Connors, Buffalo, N. Y.	36-52	39-41	32.6	30.2
*Buffalo Enquirer	W. J. Connors, Buffalo, N. Y.	36-49	39-39	32.6	30.2
Dodger IV	Evers & Padgett, Quincy, Ill.	37-48	D.N.S.	31.8	...
Ugly Duckling IV	Harry Godley, Davenport, Ia.	38-58	D.N.S.	30.8	...
Mark Twain	Judson H. Boghton, St. Louis, Mo.	Upset	D.N.S.	...	...

*Indicates winner of race.

Colonial Yacht Club, New York to Cornfield Lightship and Return Race, July 10, 1915

Boat	Class	Owner	Club	Rating	Allowance	Time of Turning	Elapsed Time	Corrected Time
Flyaway III	A	F. L. Upjohn	Huntington	71.73	Scratch	11-01-30	10-21-21	10-31-21
Cero	B	B. W. P. Frost	Columbia	32.15	18-13-30	10-11-30	25-09-32	22-06-19
Canisteo	B	N. J. Baker	Colonial	34.90	Scratch	12-07-00	23-41-00	23-41-00
Houpla	C	H. Wesson	New York	93.08	Scratch	10-47-45	Did not finish	...

Class A won by Flyaway III; Class B won by Cero; Hunt Trophy won by Flyaway III.

New York Motor Boat Club, Seventh Annual—New York: Albany and Return Race, 235 Nautical Miles.

CLASS A—START 1 P. M., JUNE 19, 1915.

Boat	Owner	Club	Rating	Allowance	Elapsed Time	Corrected Time
Flyaway III	F. L. Upjohn	Huntington Y. C.	71.73	Scratch	12-34-37	12-34-37
Satsum	T. Farmer, Jr.	Columbia Y. C.	32.66	16-15-34	31-41-45	15-26-21
Amalia II	C. Reinschield	Colonial Y. C.	39.80	10-53-58	28-45-45	17-51-47
W. E. T.	W. E. Thomas	N. Y. M. B. C.	63.50	1-46-09	Did not finish	26-44-51
Katydid	J. Van Denberg	Colonial Y. C.	64.22	1-35-44	Did not finish	...

CLASS C—START 10 P. M., JUNE 18, 1915.

Boat	Owner	Club	Rating	Allowance	Elapsed Time	Corrected Time
Betta D.	Chas. Dalton	Colonial Y. C.	28.08	13-38-56	24-23-45	20-44-49
Josephine II	W. H. Spiegelberg	N. Y. M. B. C.	36.02	5-57-58	29-36-04	23-38-14
Wilhelmina II	E. L. Kieger	Cob Web Y. C.	46.13	Scratch	26-25-17	26-25-17
Chester	A. J. McElhinney	N. Y. M. B. C.	39.23	4-23-32	31-08-24	26-44-51
Myrmec	H. P. Matthews	Mystic	35.85	6-07-37	38-33-05	32-25-28

CLASS D—START 6 A. M., JUNE 19, 1915.

Boat	Owner	Club	Rating	Allowance	Elapsed Time	Corrected Time
Eastern Star	E. L. Finch	N. Y. M. B. C.	72.34	Scratch	14-46-50	14-46-50
Amorita	W. T. Randolph	N. Y. M. B. C.	65.08	1-31-25	15-04-29	13-32-55
Standard, Sr.	R. L. Kingston	N. Y. M. B. C.	71.27	6-12-25	20-01-22	19-48-57

New Things For MOTOR Boatmen

Gray Combination Screen and Electric Running Lights.

These lamps are put out by the Gray-Hawley Mfg. Co., of 937 Jefferson avenue, Detroit, Mich., to meet government regulations and to provide for the small boat an up-to-date, handsome and reliable article. The triplex fresnel glass is built into the wood screen and made watertight with marine putty. The electric bulb is fitted into a special socket and plug of this concern's own design which enters the back of the screen and makes a secure and watertight fit. It can instantly be removed to change bulbs when necessary. The outfit is also made to order with the light entering the bottom. The screens are made extra long, to give room for placing the name of the boat on them, an arrangement less expensive than a brass name plate. The manufacturing company is prepared to paint names to order.

Rajah Waterproof Plugs.

The Rajah Auto Supply Co., of Bloomfield, N. J., is now offering the new waterproof Rajah spark plug, which is of the same construction as the regular Rajah plug, with the addition of the high heat resisting "Condensite" protecting part screwed to the plug bushing and the special nipple covering the clip terminal on the cable. This plug is stated to be particularly adapted to open boats and to those in which the engine is placed in the cockpit, as it is guaranteed to be absolutely waterproof. The plug is furnished in all standard sizes with a Rajah regular terminal fitting any cable. The price is \$1.50, postpaid.

Presto Two-Cell Hand Lamp.

The Metal Specialties Mfg. Co., of 730-738 West Monroe street, Chicago, has introduced the Presto two-cell hand lamp which is equipped with a three-volt bulb and a three-inch bull's-eye lens. The black enameled case holds two ordinary No. 6 dry batteries. The pivoted reflector may be moved to any angle, and the lamp is designed to give a brilliant, even light over the entire circle. Owing to the pivoting feature the lamp may be used for reading. The removable bail cannot be removed unless held horizontally, and the cover cannot be taken off unless the bail is first detached. The bail is made of heavy nickel-plated steel and is large enough to be slipped over the arm. The lamp, without batteries, sells for \$1.75. Batteries can be bought from any hardware or electrical store.

The No. 20 Apex Switchboard.

The Sutcliffe-Madsen Co., of 136 Liberty street, N. Y. C., eastern agent of the Henricks Magneto and Electric Co., 1235 St. Paul street, Indianapolis, Ind., is putting out the No. 20 Apex special switchboard, designed to meet the need for a small compact slate switchboard complete in every detail and requirement. The ammeter shows the charging rate or amount of current the generator is putting into the battery, and also the amount of current the lights and ignition are using. The special feature of this board is the combination pilot light, with switch and trouble light. The pilot light is removable, leaving a socket in which may be inserted a trouble light with 10 feet of cord, furnished and included with the board. The whole apparatus is mounted on the best grade of marbleized slate measuring 7 x 9 inches, with supporting brackets. The Apex switchboard, as shown in the illustration, is sold for \$12, and if voltmeter is also desired, for \$4 extra. An automatic cutoff may be had if desired.

The Economy Vaporizer.

The Economy Auto Specialty Co., of 1063 McCormick building, Chicago, Ill., has introduced a fuel vaporizing device which is said to prevent carbon deposit, to reduce gasoline consumption, valve grind-



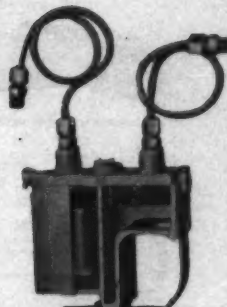
Gray running light combination for Class 1 boats.



Rajah tester.



The Rajah waterproof plug.



Economy vaporizer.



The Moisto-Rizer.



Presto electric two-cell hand lamp.



Larson & Hilker's lock-joint Peerless piston ring.



The mercury arc is started by tipping the rectifier slightly.

ing, overheating and missing and to increase engine power. The vaporizer, which is strongly made of aluminum composition, operates by taking water from the cooling system, converting it into steam, turning it back into vapor when it reaches the combustion chamber through the intake manifold, shutting off automatically when the motor stops and restarting again when the motor gets warm. The cost is \$7.50. The vaporizer is adapted chiefly for boats which cruise in fresh water.

The Royal Tester.

The Royal tester is a device which is designed to indicate the condition of the spark plug by means of the actual spark. If the plug is in good condition a regular spark is shown at the points. If porcelain is defective the spark is irregular, and if the plug is shorted the fact is made evident by the absence of the spark. If the motor is not developing its correct power the tester shows a clear spark indicating the trouble is in the mixture, and if there is a knock in the motor it is stated that the tester will indicate the individual cylinder. The body of the instrument is made of vulcanized rubber and the drawn brass wires are cast integral. The point at which the spark is visible is protected by transparent insulating glass, cemented in place. The instrument is made by the Royal Tester Co., of 122 Anderson street, Pittsburgh, Pa. The price is \$1.

The Moisto-Rizer.

The Moisto-Rizer Co., of Stockton, Cal., is making the Moisto-Rizer, a device designed to automatically and uniformly generate moisture and to charge or impregnate the air supply to the carburetor with whatever quantity the engine may need to enable it to operate to its greatest perfection. This result is accomplished by water contained in the device which insures the delivery of an even quality mixture. Claims made for the Moisto-Rizer are that the consequent greater expansion of the mixture insures increased fuel economy, less friction between pistons and cylinders, improved lubrication, removal of carbon deposits, better running qualities and longer life of the mechanism. The device, complete with 2 1/2 feet of 1 1/2-inch flexible steel tubing, sells for \$15.

Peerless Piston Rings.

Larson & Hilker, 19 South La Salle street, Chicago, Ill., are the distributors of the Peerless piston ring, an eccentric ring which has been designed to give all the advantages of this type of ring and eliminate as well the leak at the joint. To effect this, a lock joint, integral with the ring, is used. The ring itself is made of close-grain gray cast iron, with the original foundry scale of the metal on the inner surface. Made in a specially designed machine, the top, bottom and outer surfaces are accurately ground and are guaranteed to be within one-thousandth part of an inch of the specified dimensions.

Mercury Arc Rectifier.

The General Electric Co., of Schenectady, N. Y., is marketing a new and inexpensive arc rectifier for charging small storage batteries and for numerous other uses where not over 5-ampere 12-volt direct current is required and only alternating current is available. The rectifier consists of a metal base, on which are mounted the necessary resistance coils and the rectifier tube in a suitable cover, the whole being encased in perforated sheet metal. It is designed for charging one 3-cell, one 6-cell or two 2-cell batteries, as required, and is automatic in that it is self-adjusting to any of these three conditions. This type of rectifier can be furnished for 60, 30, 40, 30 or 25 cycle, 110-volt circuits; it is exceedingly compact and weighs only 15 pounds. It is stated that no mechanical ability is required either to install or operate it. Based on a charge of ten cents per k.w. hour for current, the cost for charging a 12-volt (6-cell) battery is about thirteen cents.



The Apex switchboard, which sells for \$12.



The General Electric Co.'s mercury arc rectifier.



The Fulton marine pump closet.

The Fulton Closet.

The National Gauge Co., of 304 Pacific street, Brooklyn, N. Y., is manufacturing the new Fulton marine pump closet which is so designed that it can be placed in any locker. The dimensions are as follows: Side to side, 18 inches; front to back, 14 inches; height, 11 inches, and pump cylinder, 2 1/4 inches. The bowl is of porcelain and the seat and cover may be had in oak, birch or imitation mahogany, with nickel-plated post hinges. The pump and fittings are of bronze, and the bronze discharge valve is leather-cushioned. Features of the article are short and straight discharge and a combined automatic double-acting suction and supply valve. The closet, complete with seat and cover of oak, birch or imitation mahogany, is sold for \$30, and with solid mahogany, for \$35. Outboard connections, with hose and clamps complete for suction and discharge, may be had for \$7. The closet can be installed right or left, and lead pipe can be used if desired, while it is stated that no skill is required to make the installation.

Illinois Valve Remover.

H. G. Pare, of 30 North Michigan boulevard, Chicago, markets the Illinois valve remover which is designed to facilitate the rapid removal and replacement of the valve and also to enable the spring to be held firmly in position until the valve is restored to the engine, leaving both the operator's hands free. Both jaws are adjustable to any desired angle, allowing the tool to be used with any size motor. The price is \$1.

Mesinger Flexible Driving Belt.

The H. & F. Mesinger Mfg. Co., of East 144th street, New York City, has introduced a special flexible driving belt designed for electrical generation, etc. This belt is of chain type, being made up of outside double links of sole leather correctly shaped for V pulleys connected to each other by central links of steel; the latter do not bear on the pulleys, consequently the result is a silent drive. Each double leather link forms a complete detachable unit, rendering adjustment a simple matter. The chain is designed to give a positive drive, being flexible enough to follow the pulley closely.

Hayward Automatic Wrench.

The Hayward Wrench Co., of 700 Cass avenue, St. Louis, Mo., makes an automatic pipe and nut wrench which is designed to adjust itself instantly to any size of pipe or nut within its capacity. The harder the pressure the tighter the wrench holds. It is made from high carbon forged steel and is well finished in three sizes. Prices are with 1/4-inch opening, \$1.25; with 3/4-inch, \$1.75, and with 1 1/4-inch, \$2.25.

Dyke's Motor Manual.

In this volume, published by A. L. Dyke, of St. Louis, Mo., several chapters have been devoted to the discussion of marine motors and motor boats. The author has not attempted to classify marine motors with automobile engines, but recognizes and points out the inherent differences of the two types, and goes thoroughly into the design and construction of the former. A special chapter is devoted to the submarine, another to hydroplanes, a third to gas producers, and the subject of diagnosing and repairing engines is gone into very fully. The volume, which costs \$2.50, postpaid, is one which every motor boatman should have in his possession.

A New Master Plug.

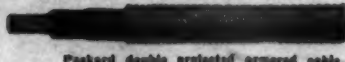
The Hartford Machine Screw Co., of Hartford, Conn., which has manufactured the Master plug for many years, is putting a new model on the market this year designed especially for use in marine motors. The chief feature of this new plug is the extra long shank which puts the spark way down in the explosion chamber even though the walls of the water jacket be unusually thick. The same workmanship, finish and materials which have characterized earlier Master plugs are present in this newcomer, and the manufacturing company contends that it is absolutely leakproof and sootproof. The statement is made that the navy department of the United States government has officially adopted the Master plug and is using it exclusively.

Lang Vapor Gasket.

The Vapor Gasket Co., of Erie, Pa., makes the Lang vapor gasket which is designed to insure easy starting, to prevent back firing, to eliminate carbon deposits and to add to the flexibility of the motor. The gasket, which is intended to be installed in the intake manifold above the carburetor, is formed of



Illinois valve remover.



Packard double protected armored cable.



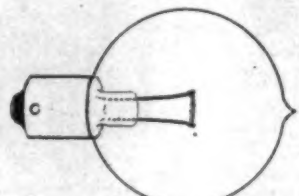
Mesinger flexible driving belt.



The Master extra long plug.



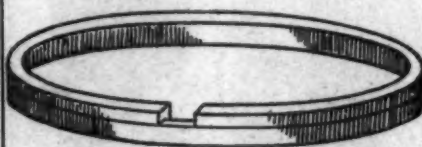
Hayward automatic wrench.



Mazda C gas-filled bulb.



Goodell-Pratt pistol grip hack-saw frame.



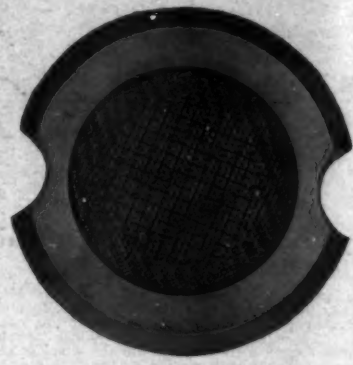
The Randerson Automatic piston ring.



Goodell-Pratt valve grinder.



Knox Model E carburetor.



Lang vapor gasket.

metal molded under pressure while hot in order to retain the copper gauge being held securely in position. It operates by assisting in the vaporization of any gasoline which may be drawn up the side of the intake pipe, the wicking forming a vapor gas reservoir which assists in starting. All sizes are furnished at \$1.50 each.

Packard Double Protected Armored Cable.

The Packard Electric Co., of Warren, Ohio, has added a double protected armored cable, designed for hard service under extreme conditions, to its representative line. The core is of soft drawn tinned copper wire laid in reverse layers to insure flexibility and a round cable. The insulating covers are made in three combinations, determined by limitations of diameter and service required. Over the insulating material is placed a layer of braid composed of special hard, tough thread made exclusively for the company, and when tightly woven it forms a partial armor against abrasion and also serves as a web to carry the enamel, which is next applied. This enamel is elastic and oil-proof. Protection against mechanical injury, abrasion, vibration, etc., is provided by an all-metal covering formed of a ribbon wound on in a very close-fitting coil, which does not interfere with the flexibility.

Mazda C Gas-Filled Bulbs.

The Federal miniature lamp division, National Lamp Works of General Electric Co., 501 South Jefferson street, Chicago, has produced a series of gas-filled headlight bulbs, known as Mazda C. These are for three-cell, 6-7 volt, or six-cell, 12-14 volt, lead type storage battery and generator lighting systems, and are designed to afford exceptionally high candlepower in conjunction with low current consumption. They are furnished in approximate candlepowers of twenty-one and twenty-four, respectively, with double or single-contact bayonet or candelabra screw bases. These lamps are constructed to give a much whiter light than that given by the vacuum type and to focus better in a parabolic reflector.

Goodell-Pratt Valve Grinder and Hack-Saw Frame.

The Goodell-Pratt Co., of Greenfield, Mass., manufactures the valve grinder illustrated on this page. The operating mechanism is completely enclosed in a cast iron case and both adjustable spanner and blade are provided. The tool is finished in Japan with lignum-vitae head and stained hardwood crank handle. It is also supplied with polished aluminum frame. The company also makes a pistol grip adjustable hack-saw frame to take blades of from eight to twelve inches. The frame is provided with a rubberoid handle and is polished and nickel-plated.

Randerson Piston Ring.

The Randerson Automatic piston ring is designed on a new principle to work against the pressure in an internal combustion motor. The ring acts as a valve in the piston, sealing it tight against compression and pressure, and it is therefore stated that one ring in a cylinder retains the full efficiency of the explosion. The design of the ring is declared to be such that when the compression and explosion takes place the ring is automatically expanded by the pressure which reaches back of the ring. It is considered particularly useful when the engine is working under heavy load. The Randerson, which is of the double eccentric type, is offered in standard sizes and is made by the DuBois Machine Shop, Inc., 118 Hudson avenue, Albany, N. Y.

Knox Model E Carburetor.

The Camden Anchor-Rockland Machine Co., of Camden, Me., is putting out the Knox model E carburetor, which is claimed to have distinct superiority in economy, flexibility and power. The carburetor is designed to have the gas and air taken care of automatically by the action of a floating atomizing valve, and perfect vaporization is stated to be accomplished by from twenty to forty vaporizing jets which are swept by a full volume of air. Briefly, the action of the carburetor is as follows: The gasoline enters through a float valve of the ordinary type and reaches its level in the float chamber. From here it is drawn up by the needle valve into a standpipe which is perforated with a number of holes and thence into a small chamber, from which it is delivered into the path of the air. The atomizing valve above referred to, lifted by the suction of the motor, uncovers the perforations in the standpipe and admits, in a vaporized condition, more or less fuel, according to the speed.

Yard & Shop

The new Bowes & Mower fast runabout being built for George W. Childs Drexel by the Mathis Yacht Building Co., of Camden, N. J.

Rex Wadman Devotes Entire Time to Van Blerck.

Rex W. Wadman, sales manager for the Van Blerck Motor Co., of Monroe, Mich., and also advertising manager for the Loew-Victor Engine Co., of Chicago, Ill., has been compelled to send in his resignation to the Loew-Victor Co., as he finds it impossible to give the time and attention to the advertising and publicity campaigns of the Loew-Victor company that they deserve. The mass of detail attendant upon the opening of a Van Blerck export office at 39 Cortlandt street, New York, and the hundred and one things cropping up daily in connection with export contracts placed and pending are keeping Mr. Wadman distinctly on the jump.

Beware of This Man.

The National Association of Engine & Boat Manufacturers advises that a man, evidently familiar with marine concerns and individuals connected therewith, who last year endeavored to negotiate personal loans by representing himself to be Mr. Taylor, of Taylor & Young, Ltd., engineers and machinery dealers, of Vancouver, B. C., is now operating as a Mr. Evans, of the Vancouver Shipbuilding Co. The following description of this man has been given: "Height, 5 feet 10½ inches; weight, about 180 pounds; complexion, light, gray hair and gray eyes, smooth-shaven; front teeth protruding and rather discolored; wears a soft felt hat, gray suit and gray overcoat; face bears evidence of excessive drinking; accent, English and manner rather pleasing; well educated and has many marks of a gentleman." This man has also been identified by manufacturers in the Middle West as Mr. Swan and Mr. Brook, and makes a specialty of attending shows and extracting small loans from the occupants of the booths, it is declared.

New Anderson Agents.

The Anderson Engine Co., of 4032 North Rockwell street, Chicago, Ill., has appointed the following agents for its line of medium and heavy-duty four-cycle marine engines: Charles Eugene Sudler, Put-in-Bay, O.; George Roberts, Harbor Beach, Mich.; Napoleon Lavoie, Oscoda, Mich., and Arthur J. Betts, 217 Abbott street, Cheboygan, Mich.

Making an Old Boat as Good as New.

A testimonial has been received from L. W. Ferdinand & Co., 152 Kneeland street, Boston, Mass., which speaks mighty well for Jeffery's marine glue, which is handled by these people. The testimonial is in the form of a letter received from one of their customers, and is as follows: "Some time ago I covered a wooden clinker boat with canvas laid in your glue and it has given perfect satisfaction, having held the canvas so closely to the wood that you would never think it was covered with canvas unless you were very close to it. This boat was a clinker-built cedar boat twenty-five years old and there didn't seem to be a possible chance to stop it leaking, but it was such a light rowing boat and one of the best shapes on the river that I hated to let it go. This boat belonged to another person, and he allowed me the exclusive use of it if I would fix it up. Result—some of your glue and enough canvas to cover it ironed on with a hot flatiron, and it hasn't leaked a drop since."



A 46-foot Alaskan freight boat, powered with a high-speed six-cylinder Van Blerck motor, which makes 12¼ miles per hour, and has a daily non-stop run of 9¼ hours.

Sterling Sales.

The Coast Fish Co., of Anacortes, Wash., has recently purchased a Sterling Model D, 25-35 h.p. heavy-duty machine through the Atlas Gas Engine Agency, which represents the Sterling Engine Co. in Seattle. This engine has been installed in the cannery tender Caprice, which is a heavy craft (13 gross tons), of the usual Puget Sound cannery tender type. Caprice is 50 feet long, has a beam of 11 feet 8 inches and a draft of 4 feet 6 inches. Through C. H. Evans & Co., San Francisco, Cal., representatives of the Sterling in that locality, a Model E, 17-25 h.p. Sterling motor has just been sold to the depot quartermaster at San Francisco, for shipment

to the quartermaster at Ft. Gibbon, Alaska. The engine is to be installed in the signal corps launch Lieutenant Beachley, for use on the Yukon River, Alaska.

Van Blerck High-Speed Motor in Freight Service.

The adaptability of the modern high-speed, high-power marine engine to heavy-duty work is shown in the installation of a six-cylinder 5½ x 6-inch Model E-6 Van Blerck in the 46 x 9-foot freight boat shown in the illustration on this page. The engine operates at from 650 to 1,000 r.p.m., and the vessel, carrying from four to eight tons of freight on each trip, has to make one non-stop of run of 9¼ hours. Since installing the new Van Blerck (the old power plant was a 60 h.p. heavy-duty, slow-turning motor), her owner, Oscar Johansen, has increased the speed from 8½ to 12¼ miles per hour, and reports that he uses less fuel and less oil. He also states that he finds the motor more reliable, more consistent and much quieter. In addition, the new power plant occupies a little less than half the space his former engine did, giving him more room to carry freight. The boat is operated out of Wrangell, Alaska, and is in constant commission from the opening to the close of navigation.

Not a Magneto Spit Fire if Packed in a Blue Box.

To safeguard users' interests as well as their own, A. R. Mosler & Co., of Mt. Vernon, N. Y., are warning motor boatmen against being misled by apparently attractive offers of a plug packed in a blue box and described as a genuine Mosler Spit Fire, unless it is sold and bought for what it is—a battery type plug intended for use only in low-compression engines with battery ignition exclusively. This plug is of Mosler manufacture, and is stated to be a good plug for the purpose for which it is intended, but it was not designed for use in high-compression engines nor with magnetos, and its manufacture was discontinued when the makers discovered that it was being sold for uses other than that for which it was intended. The magneto type Spit Fire is packed in a yellow box and the platinum point Spit Fire is sold with a red tag. The manufacturers decline to guarantee the "blue box"

plugs under present conditions, and no longer supply them, although it is possible that some dealers are still offering them for sale.

Licensed Builders of Hand Boats in the West.

The Marine Engine & Supply Co., of 832 South Los Angeles street, Los Angeles, Cal., advises that it now is the exclusive licensed builder in the states of Washington, Oregon and California. It recently has delivered to Stewart Edward White, the author of the Blazed Trail stories, a 24-foot mahogany-finished Hand V-bottom, equipped with a Model 30 Loew-Victor motor, for use at his summer home on Lake Tahoe. The company had intended exhibiting another of these mahogany-finished boats at the Loew-Victor booth at the Panama-Pacific Exposition, but reports that the boat was sold on the steamer wharf before it reached the exposition, and that it now is rushing through a duplicate for exposition purposes.

Burd Increases Capital Stock.

At a special meeting of the stockholders of the Burd High Compression Ring Co., held recently at its office in Rockford, Ill., it was voted unanimously to increase the capital stock of the company from \$50,000 to \$200,000. The additional capital was voted because of the large contracts the company has been receiving and for the purpose of adding to equipment and enlarging the business.

A Speedy 33-Foot Day Cruiser.

The three illustrations at the bottom of this page show a fast day cruiser built by the Valley Boat Co., of Saginaw, Mich., for the Conodoguinet Construction Co., of Carlisle, Pa., and powered with a Loew-Victor motor. This boat has a cedar-planked hull with mahogany finish and canvas decks, and is equipped with a signal mast and small jib sail for use in case of emergencies. It is an attractive outfit in every way and the equipment is very complete, comprising in part a Kroh auto top with easy entrance devices both fore and aft, and Sanborn marine speedometer and Stewart revolution counter installed on the bulkhead. The motor is a six-cylinder Model 15 Loew-Victor, which gives the boat a speed of 15 miles when turning at 850 r.p.m., and developing between 50 and 55 h.p. At slightly increased revolutions the boat is expected to show a speed of 19 miles per hour.

Marine Supply Company Organizes in Cuba.

The incorporation has been announced from Cuba of the Compania Nautico-Mercantil, or Nautico-Mercantile Company, of Armagura 23, Havana, Cuba. This is stated to be the first and only organization of its kind in Cuba, and the incorporators believe that they have

before them a broad field, ranging from the small rowboat for pleasure purposes up to the conduct of a general importing business. The concern now purposes to establish connections, solicit correspondence and catalogues, price and special discount lists and to thoroughly prepare itself for an active campaign. References given are the Cuban branch of the Royal Bank of Canada, the Trust Company of Cuba and Messrs. N. Gelats & Co., all of Havana.

Minerva Changes Hands.

The 80-foot motor yacht Minerva, formerly owned by Henry Schwarzwaelder, of Brooklyn, has been sold to Alexander S. Cochrane, of New York, to be used as a tender for the latter's motor auxiliary schooner Sea Call.

High-Speed Diesel Motor Boat Promised San Francisco Bay.

The Busch-Sulzer Bros.-Diesel Engine Co. entertained the Pacific Motor Boat Club at its space in Machinery Palace recently. The Motor Boat Club entered the San Francisco exposition through the yacht harbor, arriving in motor boats from Belvedere. The yachtsmen were entertained by an illustrated lecture, refreshments being served during the afternoon. W. S. Heger welcomed the guests on behalf of the company, and C. H. Crocker, commodore of the Pacific Motor Boat Club, responded for the visitors. Rudolph J. Taussig, secretary of the exposition, and also a member of the Pacific Motor Boat Club, made a few remarks on behalf of the exposition. Mr. Heger stated that before the opening of next season he hoped to see a high-speed Diesel engine motor boat upon the San Francisco Bay.

A Motor Rowboat on Wheels.

It's a common enough thing nowadays to take a motor along when one wants to go boating, but we'll have to hand the prize for originality to B. A. Swenson, of Springfield, Mass., for taking motor skiff and all

with him. Mr. Swenson is the owner of one of those three-wheeled contrivances they call side-cars, and a year or so ago he found that while this was sufficient to take him and his wife to his favorite fishing grounds, it didn't float very well in the water. This was the trouble, too, with most of the boats which were available, and what with bailing and rowing there wasn't much time left for fishing. After many disappointing experiences Mr. Swenson had an inspiration and last winter built a roomy 12-foot boat and equipped it with a Ferro rowboat motor. Two motor cycle wheels on an axle, a light frame and a boat cradle completed the outfit. Now on their trips Mrs. Swenson rides in the side-car and their daughter in the boat, which also accommodates the luggage. Once at their destination, the boat, which with the motor weight only a little over 150 pounds, is quickly launched, and the family speed away to any part of the lake that promises good fishing. If they don't find it, they go to another spot, or, perhaps, to another lake.

New Boats in New Zealand.

New Zealand yards have been particularly active of late in spite of the war, and yachting, always the premier sport of this country, has been enjoying a live season. Among the busiest of the boat builders are Bailey & Lowe, distributors of the Sterling engine in New Zealand.

At this yard two new cruisers have recently been completed and delivered. One, Shamrock Leaf, owned by Arch McCarthy, is used in passenger service in a locality about fifty miles from Auckland. The dimensions of Shamrock Leaf are: length, 42 feet; beam, 9



A view of the new test shop in the Sterling Engine Co.'s plant at Buffalo. There are facilities in this room for testing twenty-one motors at one time.

Minerva is powered with two Model D 45-h.p. Sterling motors.

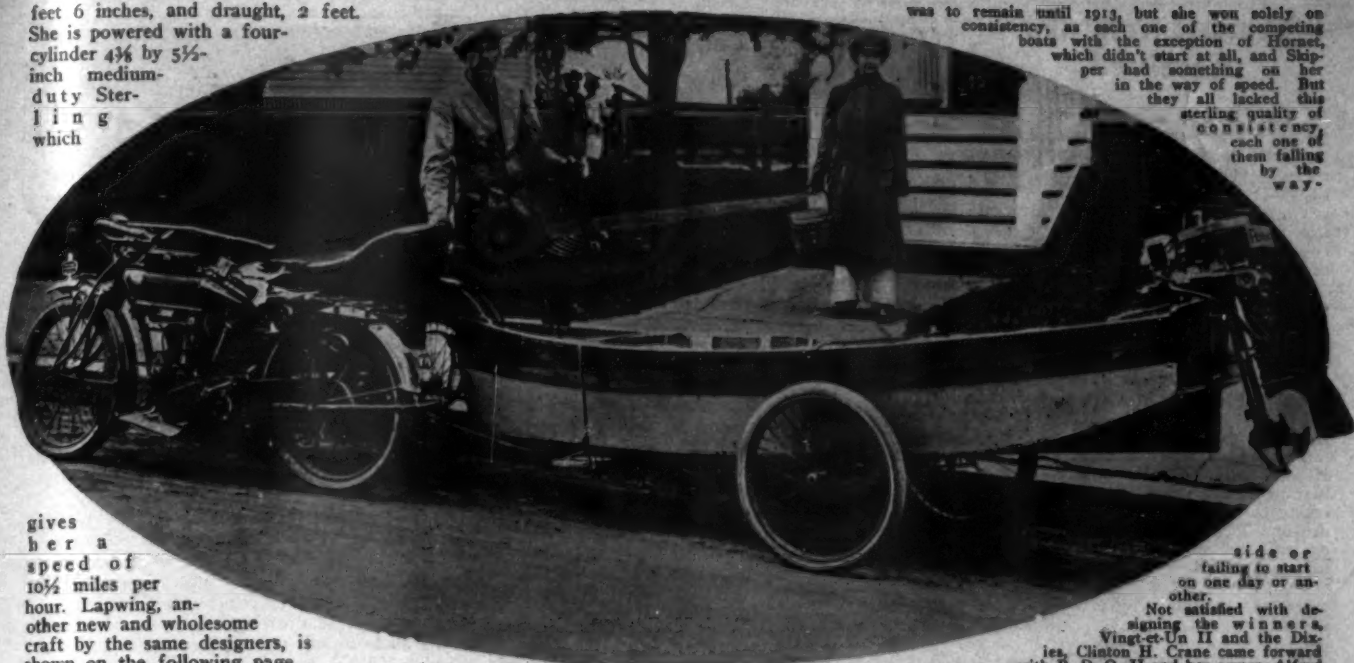
Sterling Testing Building.

The Sterling Engine Co. of Buffalo, N. Y., has recently put up a new building, specially built and equipped for the exceedingly rigorous tests given every one of its motors. This room is equipped with twenty-one blocks for giving brake horsepower tests and endurance runs of all different sized models. Furthermore, it is spacious enough to permit the mechanics to work conveniently around each engine without being crowded and hampered. The large number of testing blocks gives the advantage of permitting an engine to remain on the blocks while adjustments and minor alterations resulting from a preliminary test are made. This facilitates thorough and continuous testing of each engine without delaying other models ready for testing. The testing room is light and well ventilated, having saw-tooth roof. The testing equipment is of the most modern type and complete in every particular.



A fast day cruiser built by the Valley Boat Co., and powered with a six-cylinder Model 14 Loew-Victor motor. This attractive cruiser shows a sustained speed of 15 miles per hour.

feet 6 inches, and draught, 2 feet. She is powered with a four-cylinder 4 3/4 by 5 1/2-inch medium-duty Sterling which



gives her a speed of 10 1/2 miles per hour. Lapwing, another new and wholesome craft by the same designers, is shown on the following page.

Clematis, a Pacific Coast Cruiser.

One of the photographs on page 40 shows Clematis, a cruiser owned by John L. Thomas, of Bellingham, Wash., and powered with a 24-27 h.p. three-cylinder 6 x 8-inch Standard engine. The boat as originally laid out had the bridge deck forward, but the main advantages of the pilot house have been demonstrated on the Pacific Coast and this construction was finally decided upon. The engine is installed below the pilot house, and there is a large galley on the starboard side just aft of the engine-room. Both the galley and the toilet open into the main cabin, which extends the width of the vessel and has a companion-way leading to the after deck. Aft of this in the stern and forward of the engine-room in the bow are two staterooms. The boat is about 45 feet long by 11 feet beam, and has proven a very able and comfortable cruiser.

This illustration shows how one outboard motor fan solved the double problem of conveying his Ferro motor to the water and having a boat which wouldn't sink when he stopped bailing.

Racing for the Gold Cup.

(Continued from page 19)

the fastest event, too, but it was a case of necessity, as Squaw, owned by F. G. Bourne and entered from the Thousand Islands Club, gave her a good race the first day, and, although not starting the second, lost the third day—the day the record was made—by only ten seconds.

Skit, representing the Clayton Yacht Club, didn't make a very favorable showing, but deserves mention as the first hydroplane to compete in any of the Gold Cup races. Dixie IV, also a hydroplane, was the defending boat in 1913, the next year, and, although undoubtedly the fastest boat entered, ran only the first day, a broken water pump causing the D. N. S. initials to be put after her name on the second and third days. Mit II, owned by J. H. Hayden, caused the cup to be carried in triumph back to the Thousand Islands Yacht Club, where it

was to remain until 1913, but she won solely on consistency, as each one of the competing boats with the exception of Horset, which didn't start at all, and Skipper, had something on her in the way of speed. But they all lacked this sterling quality of consistency, each one of them falling by the way.

side or falling to start on one day or another.

Not satisfied with designing the winners, Vingt-et-Un II and the Dixies, Clinton H. Crane came forward with F. D. Q. II and her owner, Alfred Graham Miles, rode her to victory in the 1914 races, retaining title for the Thousand Islands club. Although the victory was F. D. Q. II's the fastest speed was not, and Commodore Blackton's Baby Reliance would undoubtedly have won but for a stoppage in the fuel line which dropped her back into fourth place on the first day. As it was, she won the second and third heats—the last at a speed of 37 miles per hour, and lost the cup by only one point. A good deal of what is even now considered real speed was shown in this, the tenth race for the Gold Cup, but the following year, 1915, saw Count Mankowski's consistent performer, Ankle Deep (another Crane boat), raise the record to 44.5 miles per hour.

This race, in which the Gold Cup was won from the St. Lawrence River for the first time since 1904, was hardly more exciting than that dull one of 1905, but twelve months is a short time to wait—at least when one is reviewing history—and the exciting races of 1914 more than made up for the comparative tameness of 1913. No one needs to be reminded that in last year's races Baby Speed Demon II made a world's record of 50.49 miles per hour and that Baby Reliance V very nearly approached it—or that several of the prominent racers of that event are now before the public eye as the starter at Manhasset makes ready to send them and the new ones around the course for a new world's victory.

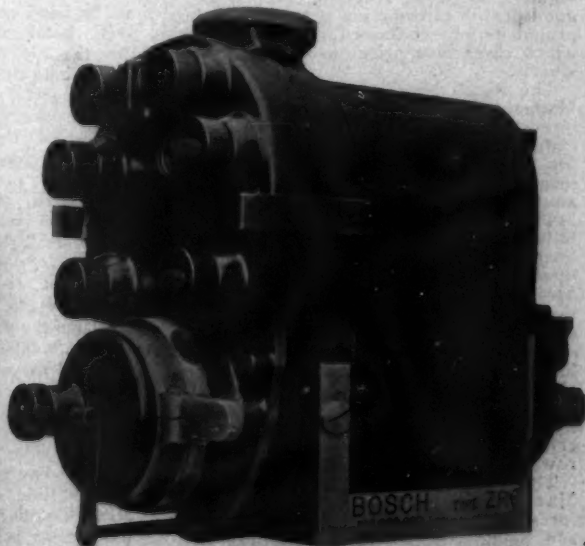
The list of probable starters is below. Look it over carefully, compare the dimensions, weigh one designer against another, and then pick the winner—if you can.

PROBABLE STARTERS IN THE 1915 GOLD CUP RACES AT MANHASSET BAY.

Name of Boat	Owner	Club	Designer	Builder	Length of Hull	Make of Motor	H.P.
Baby Speed Demon II	Mrs. J. S. Blackton	M. B. C. of America	Smith, B. & E. Co.	Smith, B. E. & Co.	29'	Sterling	100
Baby Reliance V	J. S. Blackton	Atlantic Yacht Club	Smith, B. & E. Co.	Smith, B. E. & Co.	29'	Sterling	200
Hawkeye	A. L. Jackson	Lake George Club	Hacker	Hacker	28'	Van Dusen	200
Ankle Deep Too	C. S. Mankowski	Lake George Reg. Association	Tamm, Lemons & Crane	Wood & McClure	28'	1 Sterlings	160
Buffalo Enquirer	W. J. Connors	Buffalo Yacht Club	Smith, B. & E. Co.	Smith, B. E. & Co.	28'	Sterling	200
Little Joker III	H. S. Ford	Tappan Sea Yacht Club			28'	2 Sterlings	400
Peter Pan VII	James Simpson	Columbia Yacht Club	Crouch Bros.	Reliance M. R. Co.	25' 6"	1 Sterlings	200
Miss Detroit	Detroit Syndicate	Detroit F. R. Association	Smith, B. & E. Co.	Smith, B. E. & Co.	25'	Sterling	200
Tech Jr.	C. du Pont	Wilmington Yacht Club	Apel	Apel	25'	Sterling	150
Tiddley Wink	R. Chesebrough	Huntington Yacht Club	Luders	Luders	19' 6"	Sterling	250



A Lane metallic lifeboat powered with a Frisbie motor, which was in evidence at the naval review in the Hudson last spring. The battleship Wyoming is in the background.



The figure at the bottom of this Bosch magneto is more eloquent than reams of testimonials. It shows that two million magnetos of this make have now been sold.

Trade Literature Received.

The Koban Mfg. Co., of 246 South Water Street, Milwaukee, Wis., has sent us a catalogue descriptive of its 1915 two-cylinder rowboat motor, together with price list and other literature. This all makes very interesting reading for the possessor of a rowboat who is also the owner-to-be of mechanical propulsion for it.

The Brown-Talbot Machinery Co., of Salem, Mass., is issuing a new catalogue describing the Brown-Talbot two-cycle marine motors. These are manufactured in various sizes by a concern, the present capacity of whose plant is 2,000 a year, and the motors are stated to be built of the finest materials by most experienced workmen.

The Federal Motor & Mfg. Co., of 620-3 F street, N. W., Washington, D. C., has just printed a most attractive catalogue relating to the Federal two-cylinder outboard motor. The workmanship and material that go into the manufacture of these motors is taken up in detail, and numerous illustrations are given, showing the Federal in use, and also sectional views, with all the parts named.



Lapwing, owned by Captain J. Davis, of Northcote, Auckland, N. Z. She is a 26-footer, drawing only 18 inches, and her 17-25 h.p. Sterling drives her along at good speed.

Value Proved by Usage.

(Continued from page 26)

meshing with the magneto drive gear. It gives good results running at only 300 r.p.m. and makes a great difference in the ease in handling the engine, it only being necessary to operate the clutch lever in making a landing.

For a higher speed engine the balls could be made lighter and the spring stronger—the lighter the balls and the stronger the spring the more sensitive will be the governing action.

Do not be afraid of making the patterns; they can be easily whittled out of soft wood,

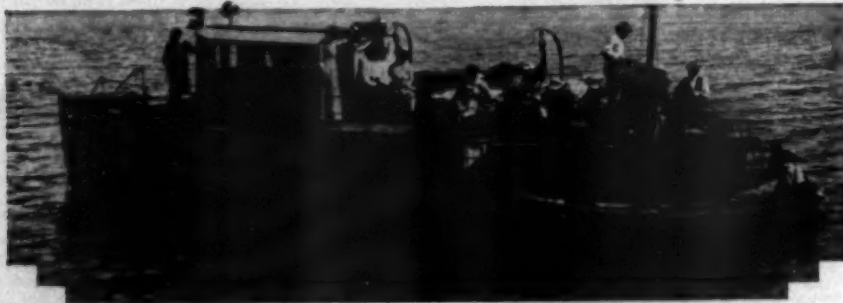
sleeve stop, D, is of brass and is screwed to the yoke as shown. A $\frac{3}{16}$ -inch steel machine screw, M, and a nut, N, are used to adjust the distance that the sleeve, C, can slide along the shaft. A steel spiral spring, F, is slipped over the shaft and held in place by an adjustable collar, G. The length and weight of the spring must be determined by experiment.

The governor can be run in any position and can either be belted or geared to the crankshaft or camshaft. Gearing is more expensive, but there is no danger from breaking or slipping belts. No bearing brackets are shown in the drawing; these would have to be made to suit the requirements of each engine. Whatever is used, some provision should be made for oiling the shaft.

A small brass roller half an inch in diameter should be made. This roller works in the slot in the sleeve, C, and is pivoted to a lever, so that when the engine speeds up the balls will fly out and slide the sleeve along the shaft, thus pushing the roller, E, along and moving the lever. For the sake of clarity the roller is shown out of position in the drawing; it should be lower down and even with the center line of the shaft.

The lever, KJ, is pivoted at one end and the other end is arranged to move either the throttle or the timer. If possible, by all means arrange the governor to work on the throttle, for one that controls the spark is wasteful of fuel and the engine when run on a full throttle and retarded spark is likely to overheat. The throttle or timer lever must move very easily; it is a good plan to install a loosely turning butterfly valve in the intake pipe.

It will require some experimenting to find the right strength of spring and the proper position of the collar, G, but when the adjustment is once obtained the boat can be handled by merely the steering wheel and the reverse lever. H. H. PARKER, Oakland, Cal.



Clematis, a pilot house cruiser in satisfactory use on the Pacific coast. She is powered with a 24-27 h.p. three-cylinder Standard motor.

The Sterling Engine Co., of Buffalo, N. Y., has issued several folders descriptive of new Sterling engines. Each folder is devoted to one model and all interesting information concerning it is included. Half-tone views and diagrams are shown.

The Rejuvenation of Tarantula is a very clever booklet, which has been sent us by the Gray Motor Co., of Detroit, Mich. This story of the man who bought a boat with any-old-engine in it, and was finally persuaded to replace it with a Model D Gray (after which, of course, his troubles ceased), should have an appeal for any present or prospective motor boat owner.

The Wilmarth & Morman Co., of Grand Rapids, Mich., has sent us its new catalogue of W. & M. reversing propellers. A good deal of information pertaining to boat propulsion is contained in this booklet, which gives also prices and sizes of these wheels.

The Bosch News, sent us by the Bosch Magneto Co., of New York City, is always interesting, and the latest number is especially so because of the story of the making and selling of the two millionth Bosch magneto. This magneto is illustrated on another page of MoToR BoatinG.

The Scripps Motor Co., of Detroit, Mich., is issuing a large poster describing and illustrating "Your Dream Motor," otherwise known as the Series B, four- and six-cylinder Scripps. Every moving part of this motor, which is described on another page of this issue, is enclosed.

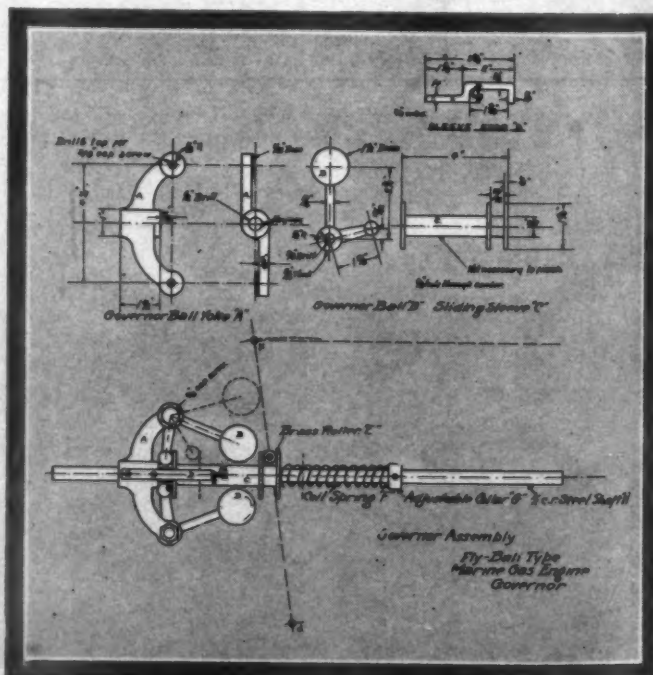
The Brooks Mfg. Co., of Saginaw, Mich., has issued its 1915 catalogue, telling all about the many Brooks designs of boats—boats which can be built from knock-down by the amateur at his home. Cabin cruisers, speedboats, runabouts, sail boats, motor rowboats, and other types are told about.

The Paragon Gear Works, of Taunton, Mass., has gotten out a poster showing pictures of all the motors at the show at Madison Square Garden last winter that were equipped with Paragon gears of one type or another. The showing is really imposing, as there were more than twenty different makes so equipped.

shellacked and rubbed down. Take or mail them to some brass foundry and brass castings will be made from them for about twenty or twenty-five cents a pound. In making the pattern for the sliding sleeve allow about one-eighth of an inch all over for finishing; the wide part in between the two flanges does not have to be machined, except for looks. It will not be necessary to machine up the balls, although they could be smoothed up by hand with a file while revolving in a small high-speed foot or power lathe. The surfaces of the bosses can be filed up by hand and $\frac{3}{4}$ -inch holes drilled for the cap screws which hold the balls to the yoke.

The yoke should be drilled through the center for a $\frac{1}{2}$ -inch cold rolled steel shaft, and it would be well to chip a small slot for a keyway. A $\frac{1}{4}$ -inch steel set-screw should also be put in to clamp the yoke to the shaft. The balls are held to yoke by cap screws, screwed into the yoke bosses, with nuts on the opposite sides.

The sleeve, C, should slide easily along the shaft and the portion between the two flanges be turned down so that there is a $\frac{17}{32}$ -inch space between. The



Assembly and constructional details of the flyball governor suggested by Mr. Parker.

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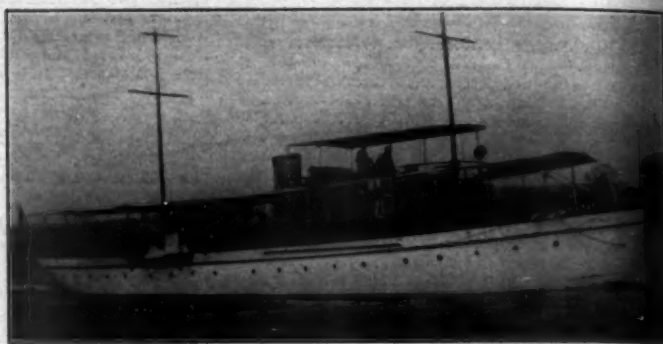
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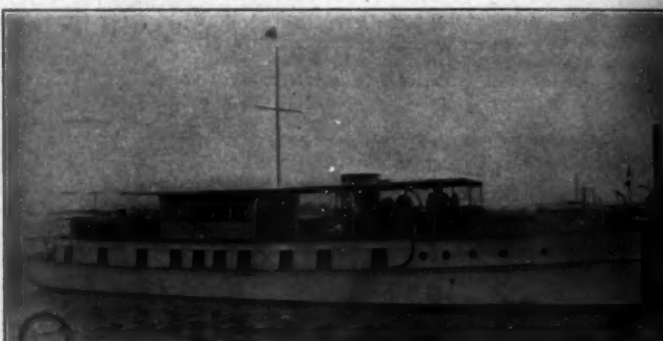
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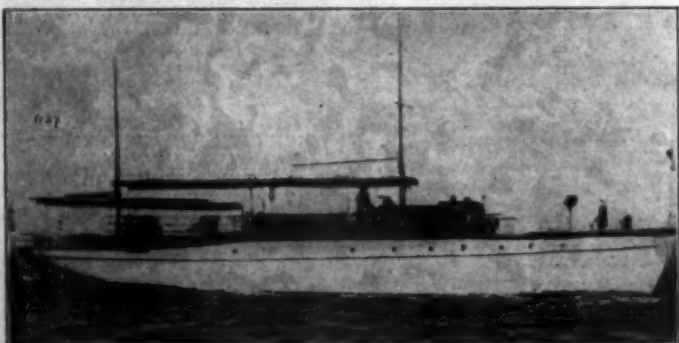
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No. 606.—For Sale or Charter.—Seagull power yacht, 90 x 14.6 x 6 ft. Lawley built from our designs. Speed 12-14 miles; Standard motor. Large accommodation, includes dining saloon, three staterooms, two bathrooms, etc. Price attractive. Cox & Stevens, 15 William Street, New York.



No. 2109.—For Sale or Charter.—Modern twin screw gasoline houseboat; 95 x 19 x 3.3 feet. Speed 13-14 miles; two 100 h.p. motors. Large social hall on deck. Dining saloon, four double staterooms, bath, etc. Very desirable craft. Cox & Stevens, 15 William St., New York.



No. 1127.—For Sale.—In commission.—Off-shore gasoline cruiser, 75x14x5 ft. Twin Screw; Standard motors; speed 12 to 14 miles. Large main saloon; two double staterooms, bath, separate galley; electric lights. Price low. Cox & Stevens, 15 William St., New York.



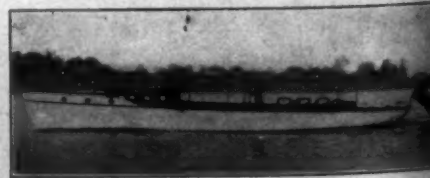
No. 1744.—For Sale.—Attractive twin screw gasoline cruiser; 67.6 x 13.6 x 4 ft. Highest grade construction by well-known firm. Speed 11-12 miles. Standard motors. Dining saloon and galley forward; two double staterooms and bath aft. Price low. Cox & Stevens, 15 William St., New York.



No. 3001.—For Sale or Charter.—Gasoline cruiser (houseboat type) 68 x 15 x 2.10 ft. Built 1913. Speed 9 miles. Three staterooms, large saloon, bath, two toilets, etc. Economical to operate. Price low. Cox & Stevens, 15 William St., New York.



No. 1305.—For Sale.—In commission.—Bridge deck cruiser; 50 x 10.9 x 2.6 ft. Speed 11-12 miles; 25-35 H.P. Standard motor. Double stateroom, saloon, etc. Handsomely finished in African mahogany. Price very low. Cox & Stevens, 15 William St., New York.



No. 1428.—For Sale.—Day Cruiser; 58 x 10.4 x 3 ft. (similar to cut). Speed 13 miles; 20th Century motor. Teak finish. Bargain. Cox & Stevens, 15 William St., New York.

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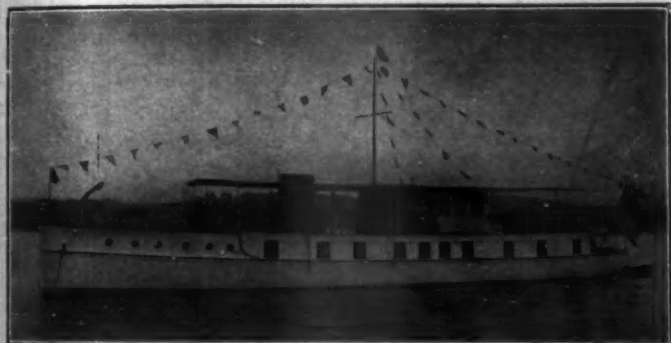
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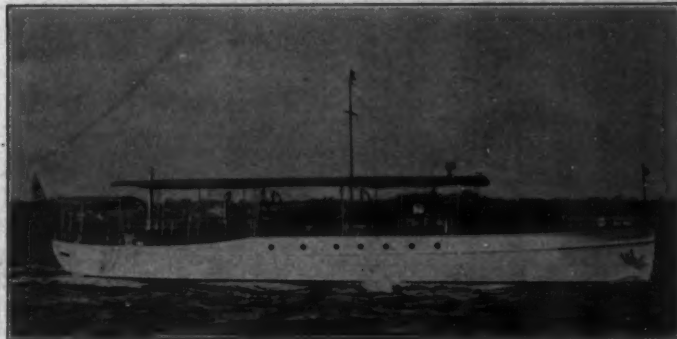
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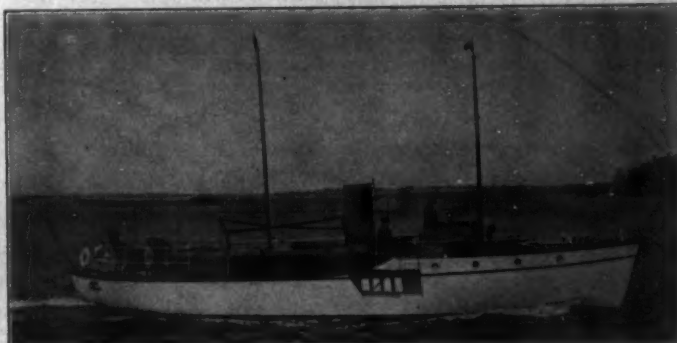
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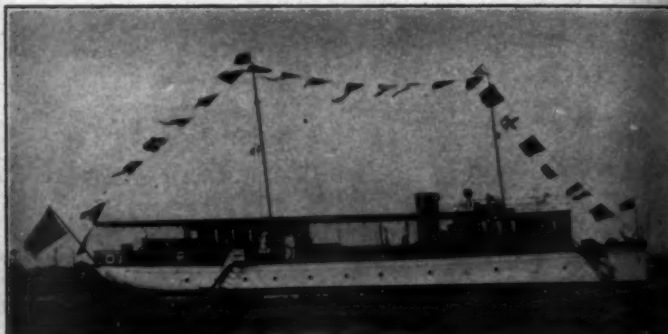
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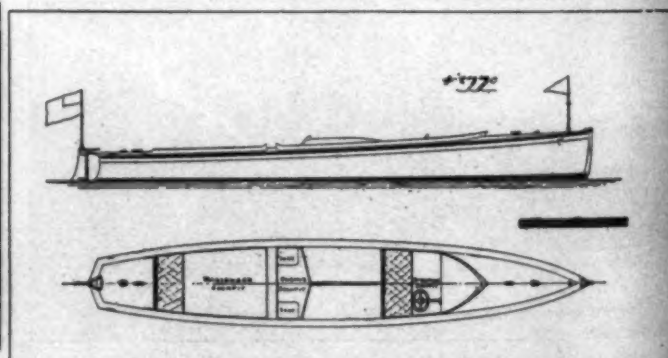
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No. 7997.—For Charter on the Lakes. Most attractive 98-foot motor yacht; two 75 H.P. Standard motors; 3 staterooms, dining saloon and social hall.



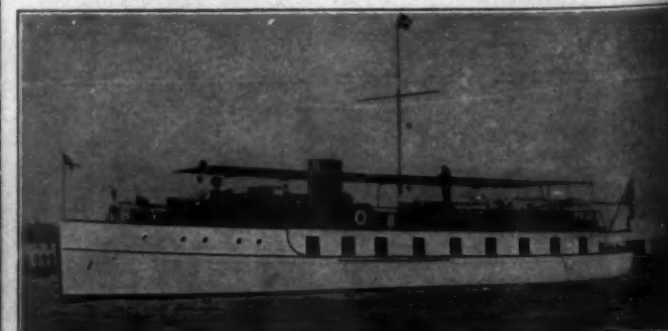
No. 8106.—Sale—Charter.—75 ft. attractive raised deck cruiser; 2 staterooms, large saloon, bath, 3 W. Cs. 2-40 H.P. 4-cylinder Murray & Tregurtha motors; speed 15 miles. Independent electric light plant.



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No. 7692.—Sale—Charter.—Twin screw gasoline cruiser. 75 ft. x 17 ft. 6 in. beam. One double and one single stateroom, bath room, large saloon, 20th Century motors.



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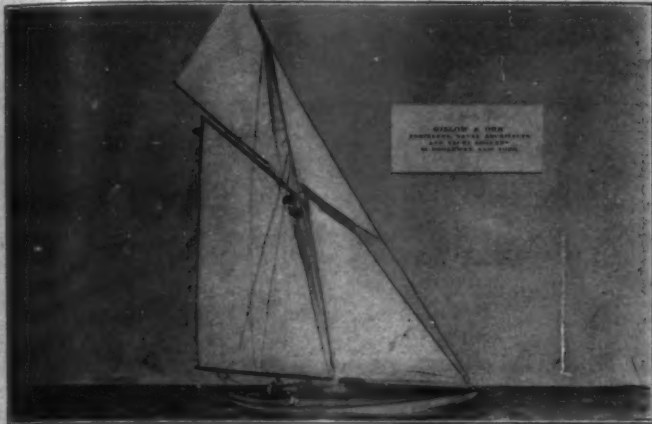
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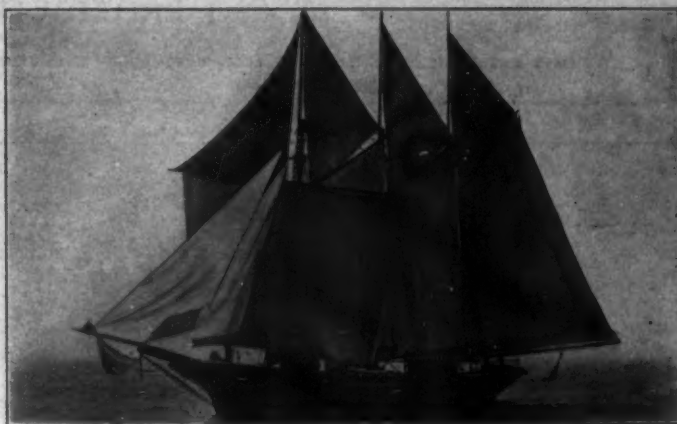
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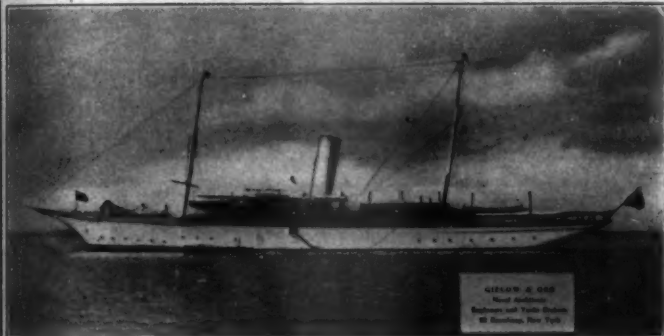
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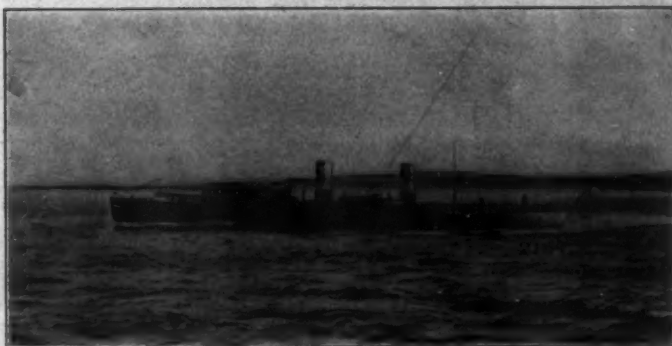
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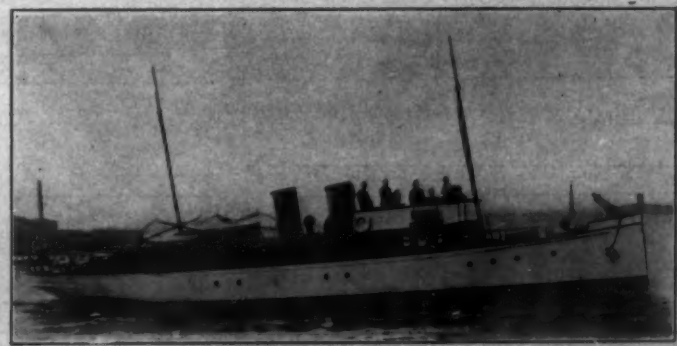
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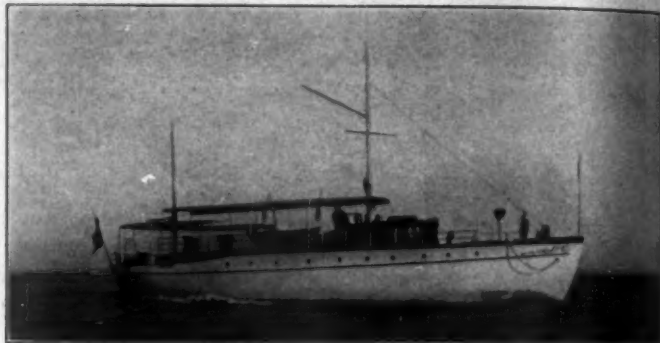
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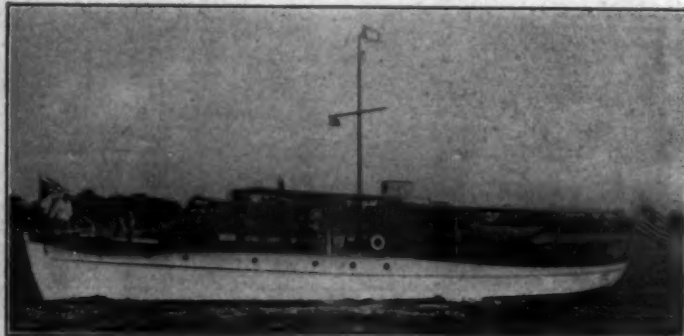
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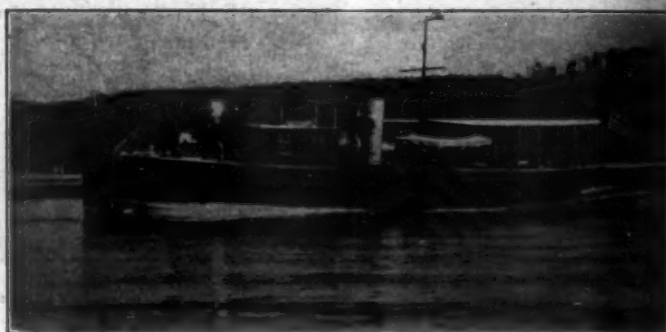
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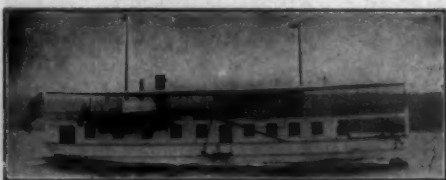
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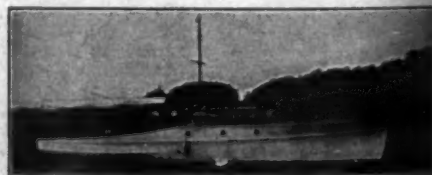
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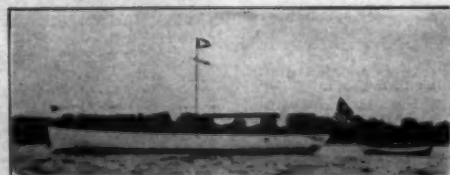
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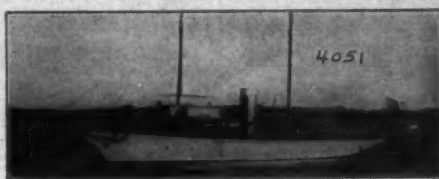
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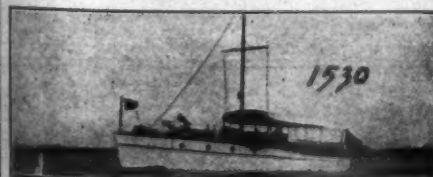
No. 1461.—40-foot cruiser. Sleeps four. Standard motor. Speed, 11 miles.



No. 1481.—60-foot cruiser. Two staterooms, saloon, etc. Standard motor.



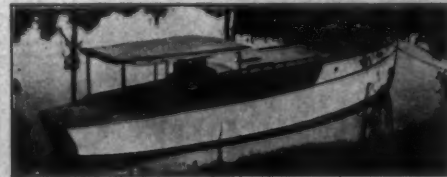
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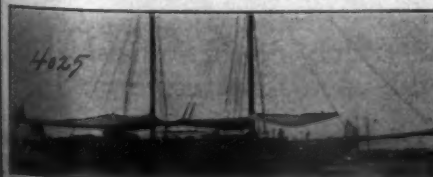
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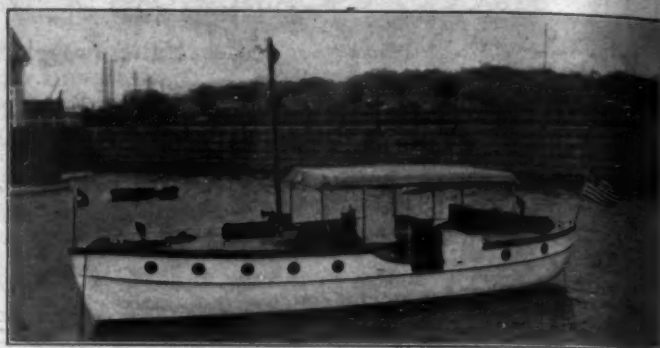
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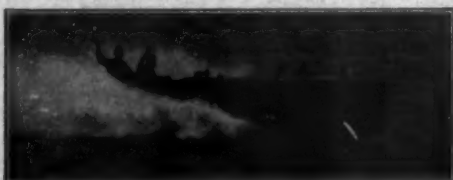
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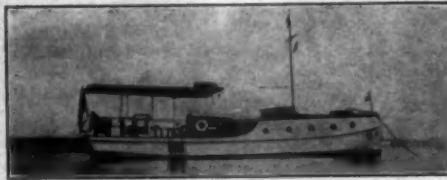
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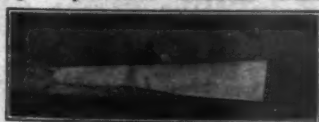
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RHODE ISLAND

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(Continued from page 17)

respective careers. Without delay we hunched the wreck, towing her in with rowboats, Mrs. Light Keeper assisting with suspicious eagerness. As the tide came in farther and farther we got the boat up on the beach till her bow was a high-water mark. Then came the ebb, and the poor, battered hull was revealed. Yet, in spite of the fearful pounding, not a frame was broken, not a rib had been sprung. As soon as the tide was low enough we got busy with sailcloth and laths, patching the holes as best we could and painting the whole with thick paint. Over the canvas where the biggest holes were we tacked box boards. The woman held a lantern for us, for it was well after dark before the job was completed.

We took down the engine as soon as we could reach it and gave it a bath of oil and grease. Then we pumped out the water that hadn't left by way of the perforations in the hull and waited for the next high tide. With it she floated again and we got her farther up the beach, guying her with ropes from the bow and both quarters. As, ordinarily, twelve hours elapse between the top of two tides in this part of the world at least, we found it 3 A. M. when we desisted from our labors of the day, munched another dramstick, and retired again to the draughty precincts of our palatial bungalow.

The next reel shows the intrepid adventurers engaged in a daring escape from the island to the mainland by jolly boat, just before the red sails of the pirate smack, relieved now of its crustacean cargo, appeared around the headland. The wind was now blowing smartly from the west, and the voyage, for a low-sided, flat-bottomed skiff such as our jolly boat, was one of constant thrills and several chills as the icy water slapped over the gunwale. Gradually, however, the forsaken summer cottages on the beach grew nearer, and then we heard the thunder of the breakers. It looked for sure like a chilly bath, but we fortunately spied a sheltered spot behind a little rocky cape and beached her safely and easily. It was then home, sweet home, by rail, and a furnace fire for us.

But the thought of the gallant craft pounding on that beach at every high tide disturbed our slumbers, and two days later we found a motor cruiser not yet laid up for the winter, and accompanied by the owner and the good fellow who had built both Alice and Chum Too (our relief ship), we again bravely sought the shores of Duck Island. Chum Too is an able little pug-nosed 26-footer with a Shipmate-warmed cabin and a master vibrator to its engine which knew its master's voice and responded to no other.

There were no summer zephyrs wafting the perfume of wildflowers and clover from the meadows that morning as we dipped into the rollers off New London light. Thanksgiving Day was at hand and it was most exceedingly cold. At least so thought three of us, but our good friend "Chips" seemed actually to perpire as he spoke of a voyage he had once made to Baffin's Bay. He was therefore immediately elected quartermaster, and the rest of the crew retired to embrace the Shipmate, till Chips complained of indigestion and had to be "separated."

That indigestion talk sounded suspicious as we encountered a miserably wet, choppy sea off Saybrook bar, the freshening west wind stroking the incoming tide the wrong way. We said nothing, however, but being nautical men, smiled pityingly. When, however, a short time later, the master vibrator refused to tremble, and the unique jump-spark Lathrop engine went dead, the indigestion began to exhibit ominous indications of becoming contagious. The seas grew bigger and bigger as we drifted helplessly over the eastern end of Long Sand Shoal, and we stopped around discouragingly.

Then the Connecticut River current got busy and we began to drift toward the Race and the Cape Verde Islands. Matters grew serious, as all hands were now firmly convinced that death was close at hand and were amazed that indigestion could assume so acute a form. The master's nose hovered over the port scupper, while the skipper of the wrecked Alice confined his attentions to the starboard one and thought of the little farm he would buy out in Arkansas where there was no salt water—if he ever got ashore again. Or wouldn't a banana plantation in the tropics be better? It would be warm there. Hades wasn't a place of heat, anyway; oh, no; it was a place of chilly liquid air on the troubled surface of which floated a lot of master vibrators, among which one must swim forever. But one would find company there. Surely Lathrop would be among those present. He had made the engine which had expired. That would be one consolation.

Below decks the hoarse guttural of Chips would be uplifted ever and anon in supplication. But the skipper of Chum Too! Here indeed was a man. Verily he could be seasick with one hand and attack the master vibrator with the other! But that wasn't all. With his toes he cleaned out the engine base, tickled the carburetor two million times, swept the soot off the plugs, removed a mud pie from the feed pipe strainer, and even smelled of the burned gas in the pet cocks. And then he had strength enough left to scratch his head and crank the engine.

A small cargo schooner bore down upon us from westward, and the skipper of Alice had an inspiration. Lifting a face, which resembled a billiard cloth in hue, from the floor of the cockpit, he managed feebly to lower the ensign and hoist it Union down at the port spreader. There was that farm in Arkansas to think of. It was of more importance than the honor of Chum Too. He stopped in a seat and contemplated the schooner dully. Suddenly all was activity aboard her. A man dashed from the wheel into the chart house and returned with another man, evidently the skipper. She luffed up and came about a quarter of a mile to leeward of us and began to beat back. It was fascinating to watch the able seamanship of that skipper. Soon we could hear him, too. He didn't care to lose any of that fair wind evidently. He almost excelled the Pirate in his command of English.

A heaving line fell across our deck, and we bent on a cable as she raced past. The cable tightened and the skipper of Alice found he'd used his thumb for a cleat. He yelled for slack and got it just as the cable whipped tight and Chum Too spun around. It was a close shave for that thumb. Thirty seconds later the cable parted and the schooner drew rapidly away, her skipper yelling maledictions at us over his poop all the way to Bartlett's Reef. We had saved a thumb and probably a big towage bill, but were still disabled. It was growing colder and the sun was sinking. Chum Too's faithful skipper got busy again.

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At last he found the seat of the trouble. The master vibrator vibrated again, the screw screwed, and we drew away from Africa and approached Saybrook. The jetties looked good from behind the protection of the weather one, and soon we were moored to a prehistoric barge, which was connected with the North American continent by a plank. Here we remained and renewed our interest in life. Was there any coal left, and was Saybrook wet or dry? Saybrook bar had been wet enough, anyway.

At dawn the next morning the skipper of Alice was found neatly coiled around the Shipmate, literally basking in its warmth. As penance he was elected to steer, and not all the wool in Australia would have excluded the icy northwest wind that morning. Duck Island was soon reached, however, and then all hands were soon plenty hot enough. *For they had met the Pirate.*

He had removed his earrings and bracelets, evidently, but retained his dirk and look of craft as he greeted us that wintry morn and invited us to breakfast. We declined, though we doubt not that Mrs. Light Keeper had murdered two fowls for the occasion. But as length the Pirate called a parley, and striding up and down in true buccannering fashion, refused to let the owners of Alice remove their property from Uncle Sam's tidal beach until said owners had come across with \$125 for the services rendered by Mrs. Light Keeper in saving the boat. Shades of Captain Avery!

"Boys," said a sympathetic vessel captain then in the harbor, "say the word, and I'll call my crew ashore and we'll take your boat off for you in short order." But we had seen Mrs. Light Keeper load a shot gun and execute fowls, and so negative the kindly offer, withdrawing to invoke the mighty, if leisurely, aid of the law. Our cause was championed, but we were advised to crawl rather than to fight, so a compromise unsatisfactory, and still usurious, but better than presenting the Pirate with Alice, was at length effected. He himself delivered the boat at New London many days later, short of many items of equipment. Chum Too, its master vibrator working beautifully, chugged up and hauled Alice back to the scene of her nativity, where she was at length rejuvenated, and with several new full-length planks in her starboard side, is now as good as ever.

Thus terminated the cruise we didn't take. Let me assure you that nothing short of a typhoon will drive me into Duck Island harbor again. There is no malice behind this warning, but surely motor boat owners who cruise about the Sound should learn of the Pirate and take care. From the inhabitants ashore we learned that we were not his first victims. Some boys borrowed an anchor from him one night that they might ride out a storm, and the rental next morning was forty dollars. His cottage is filled with treasure. So beware. Use the old harbor at Saybrook if you cannot make the beautiful harbor of the Thimbles. Salvage laws are tremendously broad, and while we were assured by a very eminent marine attorney of Boston that there was no shadow of a claim against us, according to law (except for the fowls massacred in our behalf), it is better, far better, to accept the hospitality of the hundreds of kindly disposed folk along our coast than to venture near the open jaws of this twentieth century Captain Kidd.

Speed Keynote of Chicago Meet.

(Continued from page 11)

ready for its initial trial, has many novel features and is expected to prove exceptionally fast. The new craft is 30 feet long and has a beam of 8 feet. It is to be powered with a twelve-cylinder Duesenberg motor of 750 h.p. A radical departure from ordinary practice will be the placing of such a great weight in so small a hull, but the builders think it will work out all right. The engine, reverse gear and gearbox will measure fourteen feet long.

The boat is of double-planked mahogany of a thickness of from three-eighths of an inch to one-half inch. The bottom planks will be of half-inch planking. A novel feature will be the equipment of Disturber V with three rudders, two at the stern and one at the bow, all geared together. The bow rudder is expected to prevent skidding and also to make the boat turn easier. The craft is a single-step hydroplane.

Commodore William A. Lydon's 215-foot steam yacht Lydonia, flagship of the Chicago Yacht Club fleet, will be the official boat of the regatta committee and all meetings will be held on board her. The United States Government has detailed the revenue cutter Tuscarora, under command of Captain John Barry, to police the course during the races. The timers of the races will be United States naval officers stationed in Chicago.

Valley Racing High Class.

(Continued from page 13)

grandstand jokingly called him the "Go, Get It" and the name about fits.

From way up at St. Paul other enthusiasts cruised and such little distances as five or six hundred miles were mere trifles in their estimation. From St. Louis came the whole club, club house and all. It being of the floating variety, it may not appear very much of a jaunt, but when one considers towing a heavy house boat nearly one hundred and fifty miles against a 4-knot current, things look different. All the fleet made fast to their club house and towed her up and then anchored around it during their stay at Hannibal.

Cruisers were also there from Muscatine, Quincy, Davenport, Burlington and many other ports.

Of the old timers, of course that enthusiastic and true sportsman, Doc Strong, of Burlington, Ia., was there with a new P. D. Q.—this time his P. D. Q. V. He had the old faithful P. D. Q. IV along, too, as sort of a pace maker, but she wasn't necessary. The new craft steps along some five miles an hour faster than the old boat did, although she is powered with the self-same four-cylinder, Johnson V-type two-cycle motor that behaved gracefully throughout the three days' racing. This motor has only a 2-inch bore and a 4-inch stroke, yet it drives a three-blade, 16 x

(Continued on page 52)

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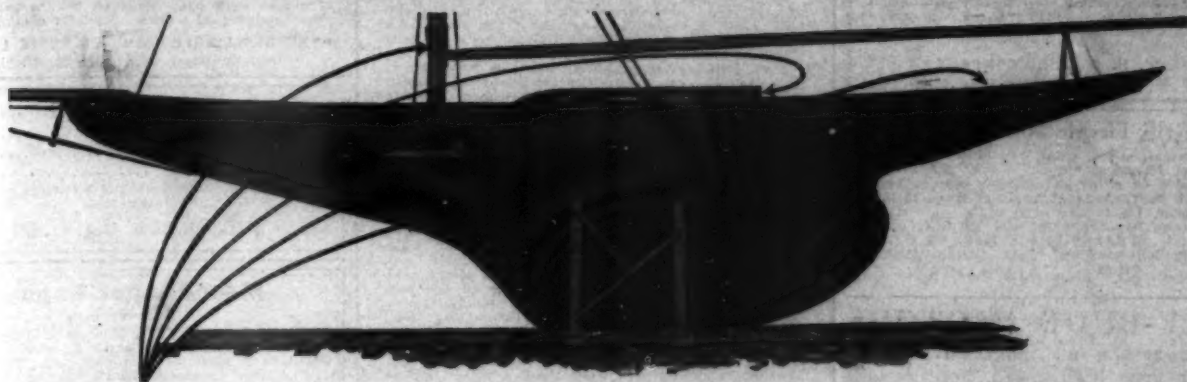
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Valley Racing High Class

(Continued from page 30)

28-inch Hyde propeller at over 1,500 r.p.m. The boat, which is 16 feet in length by 5 feet beam, is a single-step hydroplane built by Dr. Strong himself. The bare hull weighed 530 pounds and the motor 530 pounds, bringing the complete outfit with crew aboard well over 1,000 pounds. The owner, of course, did the driving, and he had Carl Krieschbaum as his assistant. P. D. Q. V's best speed was 32.8 miles an hour over the Hannibal 2 1/2-mile course, which was not an inch too short, with several turns and about a 4-knot current. No doubt in still water on a straight-away P. D. Q. V could make a good 33 miles an hour. Dr. Strong took first place in both heats of Class B, a second in Class C and a second and a third in Class D, a very creditable showing.

Little Harry Godley, whom everyone remembers as having been at Peoria last year with his tiny Ugly Duckling II, which was practically unbeatable, was on deck with two new Ugly Ducklings, a pretty good hatch for the winter. He towed them all the way down from Davenport, Ia., on his lighter Incubator, with his own cruiser Pipe Dream. From the looks of the little rural town of Hannibal most all the townfolks of Davenport must have come down with Harry. They were bedecked with ribbons and badges bearing the inscription "Ugly Duckling" and lacked none in enthusiasm, either. They came down to see their favorites win and were well rewarded for their trouble.

Ugly Duckling IV, which is the larger of the two new Ducklings, measures 20 feet in length by 5 feet 8 inches beam and was built by her owner. Her power consists of two six-cylinder Pierce-Budd 4 by 4-inch motors connected in tandem, each motor having two Kingston carburetors and each a Bosch magneto. The motors turn up 1,500 r.p.m. and drive through a 1.4 to 1 gear box a three-blade 16 x 27-inch propeller.

In the actual racing, Ugly Duckling showed the lack of tuning up, as the motor was only placed in the hull the day before the trip from Davenport to Hannibal began. However, when she did run, and she always went after the motors were started, she ran right up on top of the water, steady as a battleship, with the exhaust singing like a pipe organ. In speed, Ugly Duckling IV averaged slightly better than 36 miles an hour for an entire race and nearly 37 for her best lap. She was first in both heats of Class C, first in one heat of Class D and first in one heat for the Admiral's trophy. In the other events in which this boat was entered she was always so late in starting that she could not overtake the field.

The other Ugly Duckling, No. III, is a 15-footer designed by Pierce and powered by the Pierce-Budd motor which was in the notable Duckling of 1914. She drove a 16 x 24-inch Michigan propeller and obtained better than 26 miles an hour with her. Unfortunately, one of her crew was taken sick soon after the opening of the regatta and had to be removed to the hospital. This prevented her from starting in any further races.

Two other familiar faces among the competitors always seen at the Valley races are Messrs. Evers and Padgett. Sure enough, they were at Hannibal this year, enthusiastic as ever and game to the core. Last year they had good luck with their Dodger IV at Peoria which put them out of the running, but, so the story goes, they started in right after last year's races to prepare for the races of 1915. Unfortunately for these owners the game is advancing so rapidly these days and so many changes and improvements are being made in hulls and power plants that an outfit only a year old has not much show in competition against the up-to-date ones. Dodger IV was just a wee bit slow for others in her class, but as she kept gamely at it she had the honor of taking one third in the 20-mile Free for All, a first and a third for the Admiral's Trophy, which gave her the trophy for a year, and third in both heats for the Webb Trophy, which classes were all she was eligible for. Dodger IV is a 20 x 5 1/2-foot single-step hydroplane, designed and built by her owners, and is powered with a six-cylinder, 5 1/2 x 6-inch Van Blerck motor. The motor turns at 1,700 r.p.m. and drives a three-blade 18 x 30-inch Columbian propeller through a gear box having a 1 to 1.25 step up ratio. Not a moment's trouble was experienced with power plant or hull at any time. Her best speed was 33.95 miles per hour.

Harry Groat, one of the best-known racing men of the country, was at Hannibal with a new boat, Baby Wisconsin, one of his own design and built by the Warren Boat Co., of Chicago. This boat is powered with something absolutely new in the marine world, that is a Wisconsin motor having a bore of 3 13/16 inches by a stroke of 6 1/2 inches, which should turn up at 3,000 r.p.m. and drive a 17x22-inch propeller at the same speed. Unfortunately, this motor had a very hearty appetite for spark plugs and as fast as they were fed to her they were actually burned up. It wasn't long before the stock on hand was completely exhausted and as none of the right kind could be obtained, it was useless to expect even fair results. Several brands of plugs were tried with the same result, and then further efforts were abandoned. However, during the few bursts of speed which were possible under these conditions her possibilities were clearly evident. The motor has a piston displacement of only 296 cubic inches and weighs 600 pounds. The bare hull of Baby Wisconsin weighed only 325 pounds and probably the complete outfit, with crew aboard, tipped the scales in the neighborhood of 2,000 pounds.

A Western regatta would not be complete no matter where held without Bill Warren of the Warren Boat Co., and, sure enough, Bill was there with his Billiken. This owner has been giving a good deal of his attention lately to taking motion pictures, and evidently has not had the necessary time to build a new hull since last year, as Billiken is simply the old Warren-Groat renamed, a new six-cylinder Wisconsin motor replacing the old four-cylinder motor of the same make. Billiken came to grief with engine trouble in the first heat of Class D on the first day, smashing things up generally. Bill said a few harsh words and with his camera over his shoulder took the first train back for Chicago. We hope he is not too disgusted to "come back" for later races this year, for there are all too few sportsmen like Bill Warren in the game today.

The above list completely enumerates the names of owners with which we are familiar at these regattas

(Continued on page 54)

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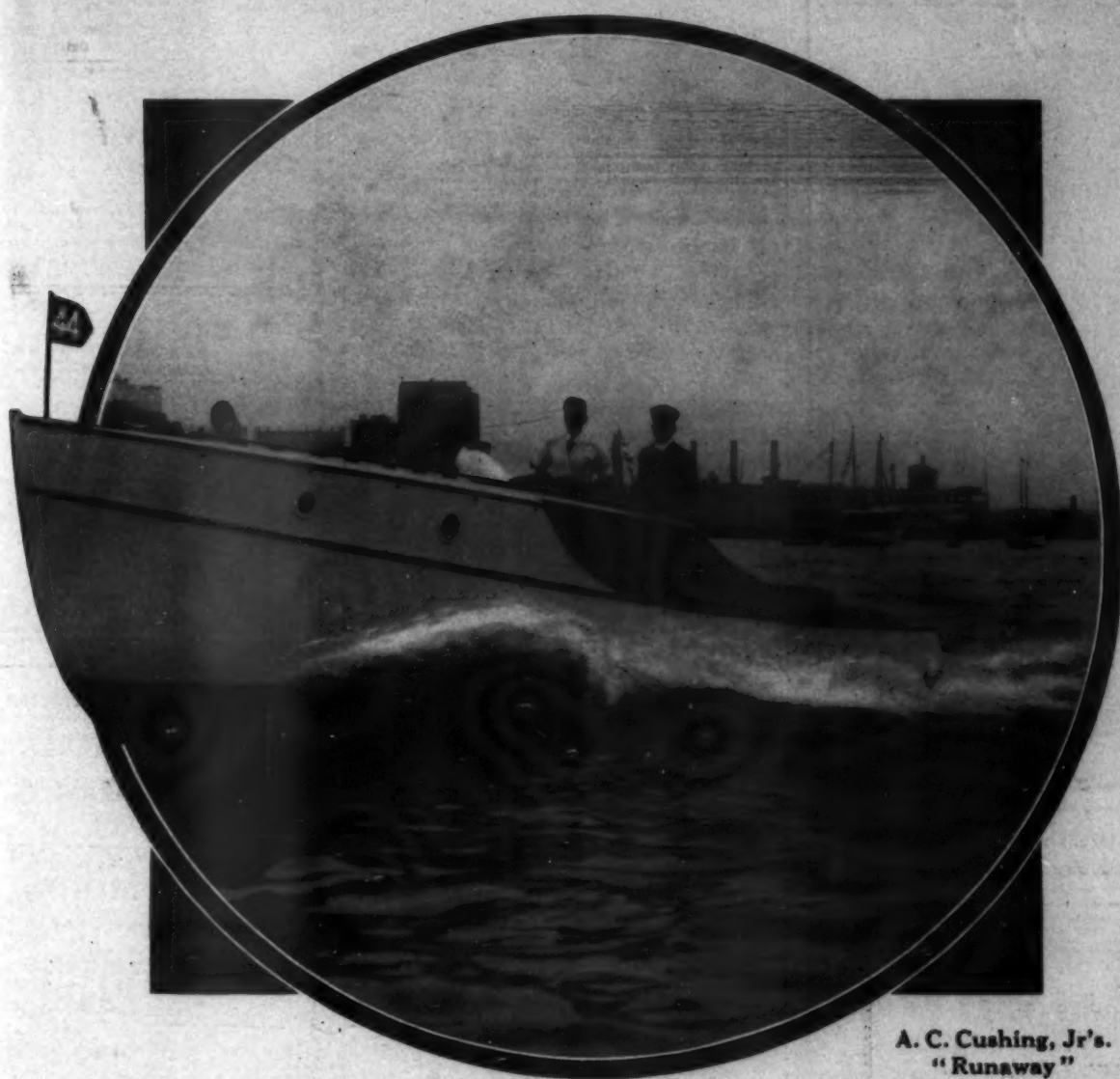
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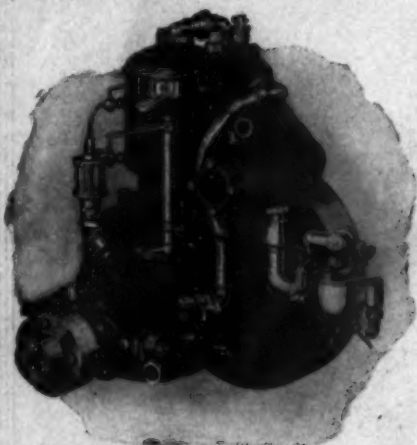
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Valley Racing High Class.

(Continued from page 52)

of the Mississippi Valley Power Boat Association, and every one will notice there is more than one name lacking this year. But there is one group of names among which there seem to be as yet no absences, year after year, and that group is none other than the officials. Admiral Hanley, or, as he should now be more correctly called, ex-Admiral Hanley, was on the job and seemed to be everywhere at once. Nothing escaped him and much of the success of the regatta is due to his untiring efforts. He came all the way down from Muscatine, Ia., with Ethel V., along with Secretary and Mrs. Kidder in their smart runabout Open Exhaust, who made the run down from La Crosse, Wis., in remarkably quick time. Admiral-elect Edward H. Van Patten had charge of the timing; Rear Admiral F. C. Smith of Keokuk was gunner and chief custodian of the wireless, which didn't wireless when it was wanted. Admiral Smith now very emphatically declares that the wireless method of timing boats on mile dashes is not a success, and we agree with him. All one morning we waited on the banks of the Mississippi, with mosquitoes biting as violently as they do in any Jersey town, trying to "tune" our instrument with the one at the upper end, and after we had successfully accomplished this it amounted to naught, as the unmuffled exhausts of the racing boats and frequent switching of freight trains near our ears had no trouble in drowning out any wireless messages.

Dr. J. W. Dixon, of Burlington, Ia., who has acted as starter at every Valley regatta for a number of years, was on the job as usual and had a good word for everyone. He came down from Burlington in his famous stern wheel cruiser, Lad, with a party of ten on board. Open house was kept aboard Lad during all of the three days and always one of the most enjoyable features of the Valley regatta is the visiting each year aboard Lad. For hospitality her crew has no peers and their wide cruising experience on the Mississippi makes them a most interesting bureau of information. To J. W. Sackrider, of Chicago, one of the judges, should go a great deal of the credit of the successful regatta. There was no detail which "Sack" was not in touch with and the knowledge which he displayed from early morning till late at night was commented upon by many.

Of the boats and owners which might be termed new-comers into this Western field of racing, probably the foremost one is William J. Connors, of Buffalo, N. Y., noted among other things for the same fight which he put up at the Gold Cup races at Lake George early last season, and at Buffalo, later, in September. Commodore Connors had his fast hydroplane, Buffalo Enquirer, shipped all the way from Buffalo for this meet, and she won every heat in which she was entered with the utmost ease, although his new boat, Buffalo Courier IV, which was given her first try-out at these Hannibal races, evidently had considerable speed up her sleeve and did not care to show what she was really capable of in the speed line. Both Buffalo Enquirer and Buffalo Courier IV are typical Smith hydroplanes, very similar to the Baby Reliances of other years. These boats are just under 30 feet in length and each is powered with an eight-cylinder, 5 1/2 x 6 1/4-inch Sterling motor, driving a 20 x 40-inch Hyde propeller. In the last year's Gold Cup race Buffalo Enquirer averaged 50 miles per hour in a 30-nautical-mile race, but her best speed in the Hannibal races was only just above 36 miles per hour. Their Sterling motors gave perfect satisfaction throughout the whole meet, and were handled and started up as easily as any first-class runabout engine. Probably before the season is much older both of these boats will show speeds very much in excess of any that have ever been shown before, and from the appearance of Buffalo Courier IV, darting up and down the Mississippi in her warming up trials, we do not hesitate in believing that she was developing a speed considerably in excess of 50 miles an hour. This hull resembles very closely that which the builders claimed earlier in the year they were constructing for Carl Fisher, and it may be that Buffalo Courier was her name for only a few days, and that in her next appearance she will be known otherwise.

Another new hydroplane is Mark Twain, a 20-footer, designed by Walter Beauvais and built by the Saint Louis Yacht & Boat Co. This little hydro is powered with one of the eight-cylinder Sterling motors rescued from the sunken hull of the first Ankle Deep after she burned at Buffalo last fall. Mark Twain undoubtedly was very fast, but unfortunately met with a mishap in the first heat of the free-for-all race, which sent her to the bottom of the Mississippi and prevented her from showing what she really could do. At the time this boat sank she was running neck and neck with Buffalo Enquirer and Buffalo Courier, and directly between them. At the upper turn of the first run the side wash from these two Buffalo boats caught Mark Twain under the bilge and turned her completely over, sending her to the bottom in a few seconds. Designer Beauvais was driving her at the time, and reports that her motor was only partially opened up, and that he feels certain that when the time came for the final spurt, his boat would have been there with the necessary speed to bring him home the winner. Mr. Beauvais was rescued by Buffalo Enquirer, which turned after the accident and picked him up, losing less than one minute in so doing, and then continued after the field, which was successfully passed and the race easily won.

Barnacle, which is now some two years old and now owned by Charles Steel, was entered in all the larger classes, but after an accident earlier in the week she was forced to withdraw from further events. This boat is powered with an eight-cylinder Van Blerck motor, and at the end of the third round in the first heat of the Webb Trophy races Barnacle was only four seconds behind the leading boat.

Panama, owned by E. D. Scofield, of St. Paul, Minn., was a winner of both heats of Class A, limited in piston displacement at 565 cubic inches, four-cycle, and 224 cubic inches, two-cycle. This boat, which is strictly of the displacement type, is powered with a Model H Capital motor of the four-cycle type, having four cylinders 3 1/4 by 5 1/2 inches, turning a 14 x 14-inch three-blade propeller 2,000 r.p.m. The hull measures 28 1/2 feet in length by 4 1/2 feet beam, and averaged 22 miles an hour in the two heats of Class A.

Full report of the times made by the various boats in the several classes will be found on page 34.

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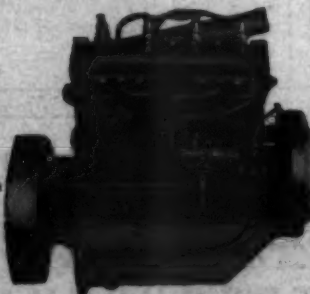
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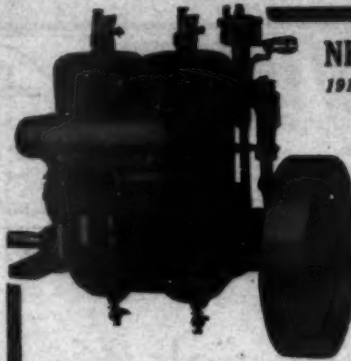
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
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
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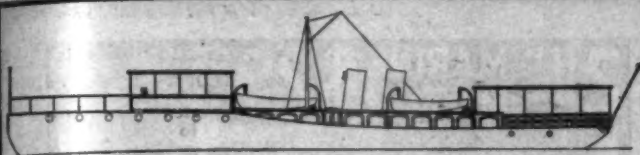
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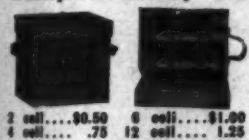


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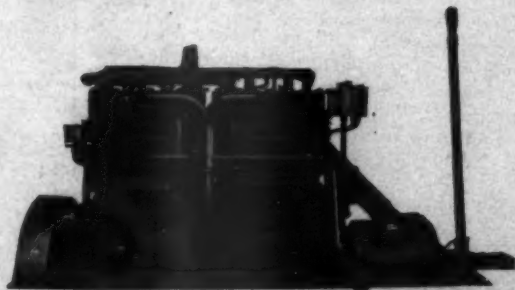
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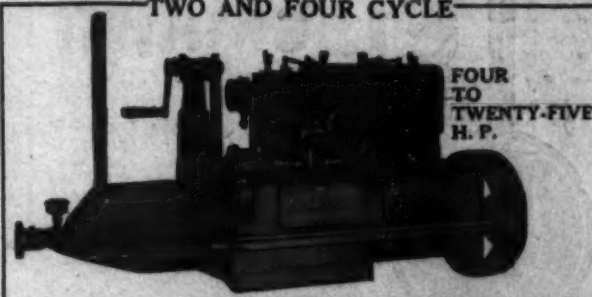
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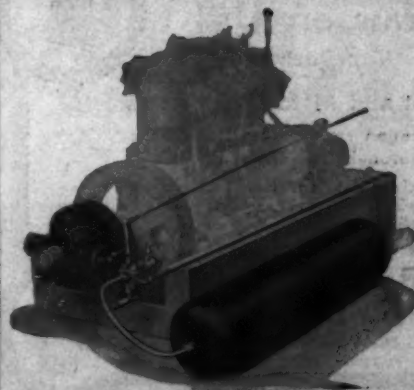


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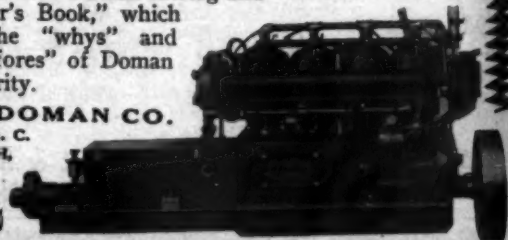
American Engine Company
621 Boston St., Detroit, Mich.

The DOMAN MARINE MOTOR

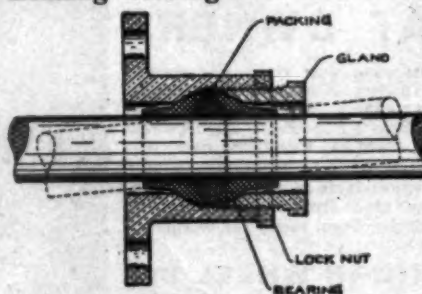
To give every Doman buyer a better engine than he expected to buy has always been the Doman policy—and that policy, coupled with the matchless quality and efficiency of Doman Motors, has made every Doman owner a satisfied customer and an ardent "booster." Write today for the Doman catalog and "Owner's Book," which give the "whys" and "wherefores" of Doman superiority.

H. C. DOMAN CO.

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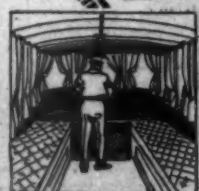
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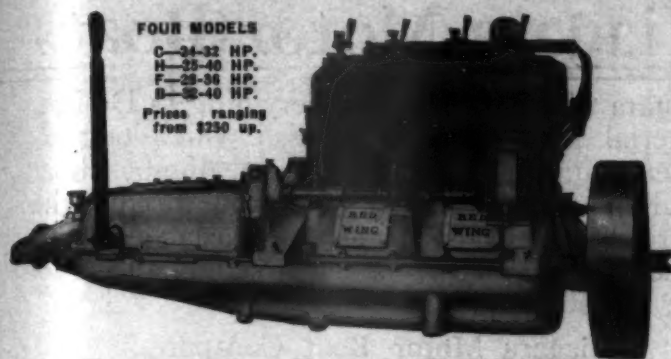
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Established 1845
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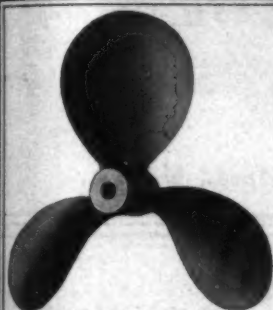
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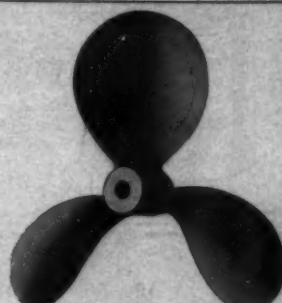
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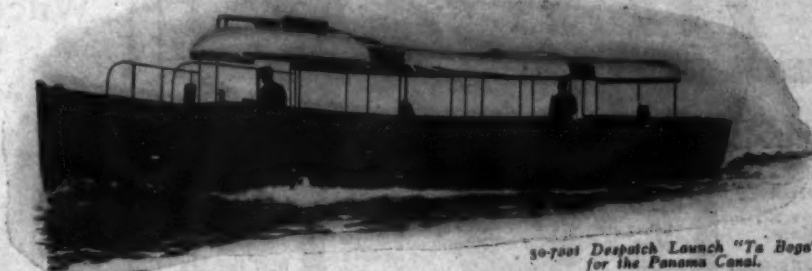
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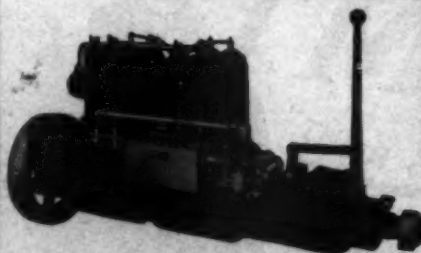
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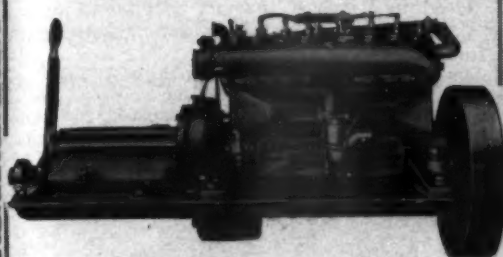
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12 to 20 H.P.**\$180.⁰⁰ and up**

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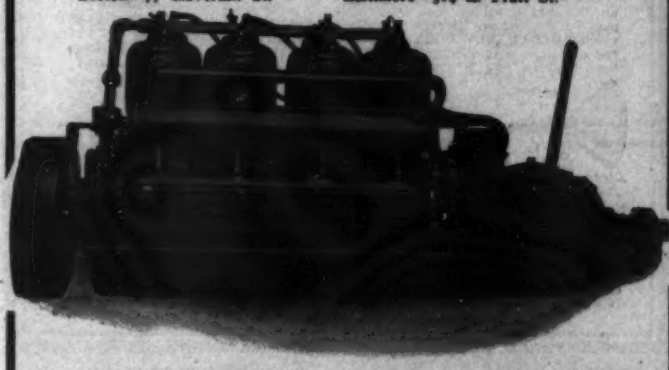
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18 H.P.

\$250

PRICES:

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2 " Single Cyl.	50
4 " " "	75
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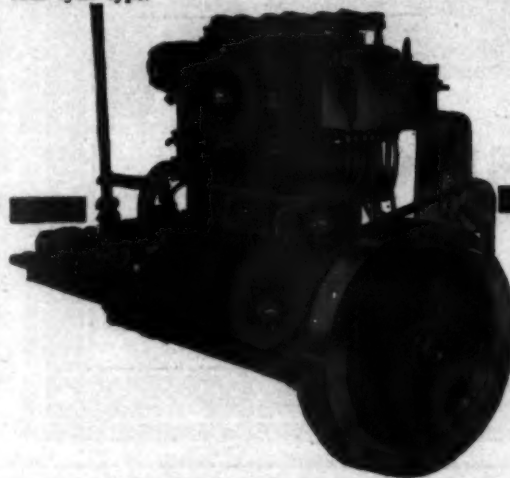
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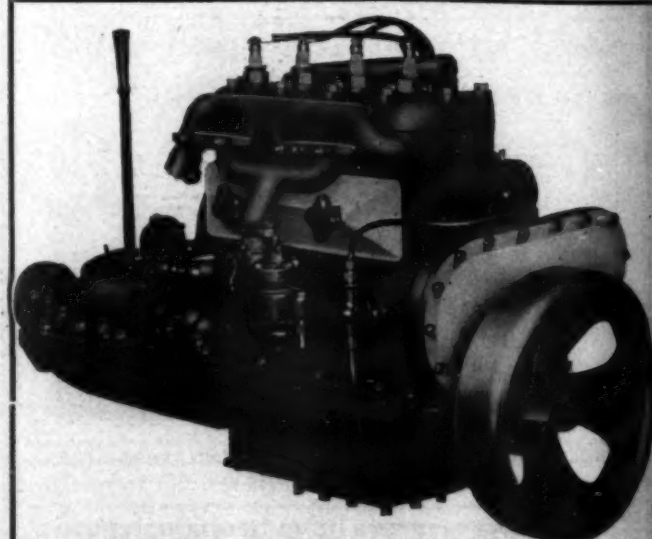


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Motor can be run 300 r.p.m. or 3000.

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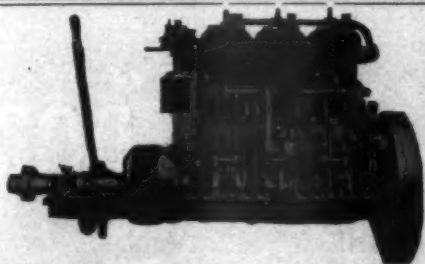
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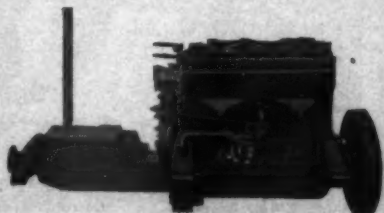
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An exact duplicate on the ways—not so far advanced. Can be finished to your taste.

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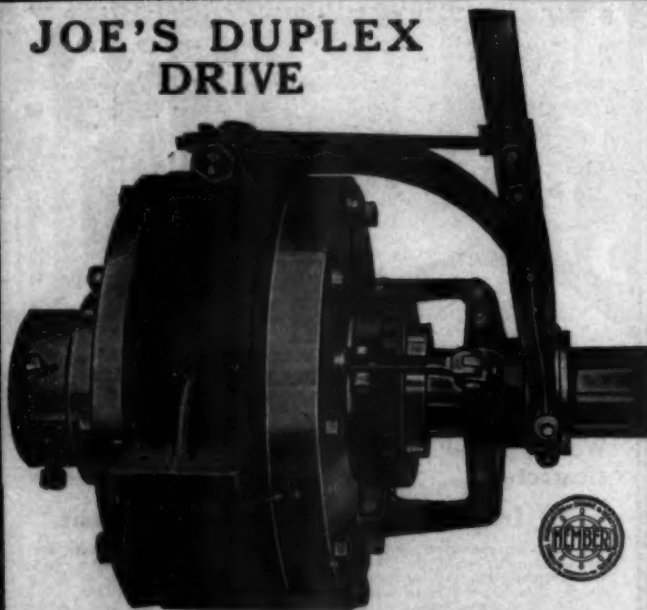
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AN ENGINE WITH A THOUSAND SPEEDS

Stop your boat in half its length from top speed, at a touch of the control lever. Dock without slowing your engine. Trawl at any speed with any type or size of boat. With the

New Reversing Propeller

you have more perfect control than an automobile. Simply shift the lever to the right speed and set the friction. No fixed notches in the quadrant to spoil perfect adjustment, when 1-18 of an inch in either direction (half the width of a notch) may mean a difference of a mile an hour in your particular boat.

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Model
With
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Propeller
and
Multiple
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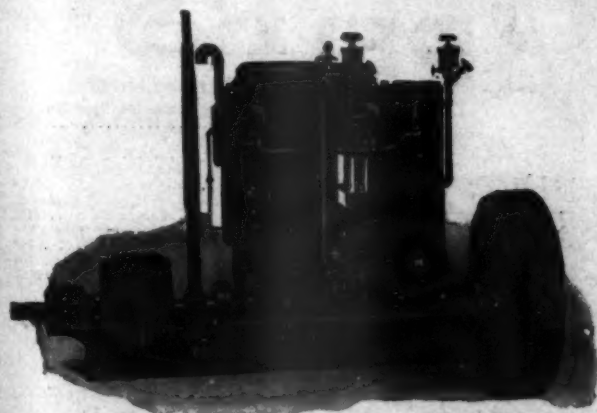
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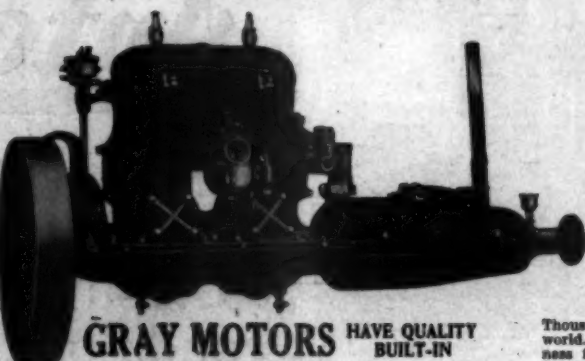
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We have just installed our 4-cylinder, 4-cycle, Model "D" engine in our boat and wish to say that we are more than delighted with it in every way. Yours very truly, THE PORTER DUCK CO., per D. P. Duggan.

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Gray Motors are quality engines through and through. The cylinders and pistons are ground to a mirror-like finish; bearings are long and interchangeable; crankshafts are perfectly ground; flywheels are smooth and perfectly balanced, giving you a smooth-running engine. In the manufacture of Gray engines every cylinder, every piston, every piston ring, every piston pin, every crankshaft, is tested with micrometer gauges and dare not vary over one-half a thousandth of an inch of absolute accuracy. Just as each one of these individual parts is closely inspected, so the finished engine must pass the final O. K. and stamp of Gray quality before it leaves our factory. Every Gray engine is tested under its own power for smooth-running, power and economy.

We show above only a few of the many testimonials we receive daily from satisfied users of our engines. Come in contact with any Gray owner and you will find him an enthusiast, yes, a booster for Gray Motors. This should be proof enough that your next engine should be a Gray.

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Gray Gearless Detachable Boat Motor	\$55
3 H.P., Single Cylinder, Model "U," 2-Cycle	55
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8 H.P., Double Cylinder, Model "U," 2-Cycle	114
11 H.P., Double Cylinder, Model "U," 4-Cycle	148
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Price of Model "D" depending on equipment.	
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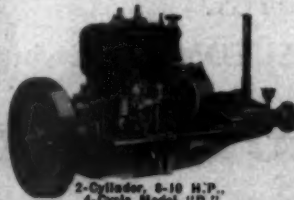
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2-Cylinder, 8-10 H.P., 4-Cycle Model "D."



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The power plant is a 10 H.P. four cylinder, four cycle, Universal Motor, equipped with reverse gear, rear starter, high tension magneto, Stewart-Warner Vacuum Fuel system, warning signal horn and outfitted for salt water use. Only the VERY BEST of materials are used in their construction and the workmanship first-class. Every boat is built under PERSONAL SUPERVISION and subject to the most RIGID INSPECTION. Every boat is sold under full guarantee, ready to run. Price ONLY \$385.

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The Six-Cylinder 7 x 9 in. Ralaco. 75 H.P.

When you find any other engine guaranteed to consume not more than one-tenth of a gallon of gasoline per horsepower per hour, then it will be time enough to make comparisons with the RALACO in reliability, cleanliness, quietness, durability and other qualities. Until then just remember that the RALACO is the most conservative engine investment you can make, because it gives the most service for the least expense.

FOR WORK BOATS AND CRUISERS
Two to Six Cylinders Ten to Seventy-five Horsepower
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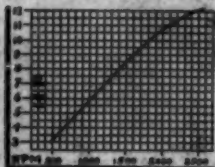
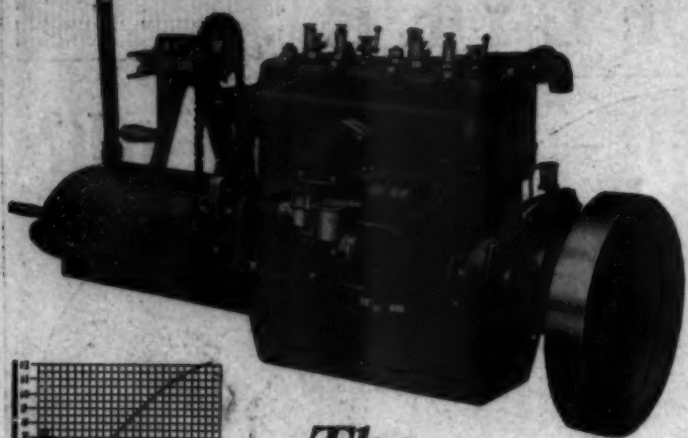
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THE Universal "Light Four" is the last word in refinement of marine motor construction—nothing beyond—you cannot believe in its exquisite smoothness of operation without seeing it in use. 500 shipped this season; not a single complaint.

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Bare Motor	\$92
Motor with Carburetor and Ignition System	115
With Above and Reverse Gear	133
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Complete with Propeller Equipment	150

The Universal "Four" is handled by the largest agents throughout the country. A few localities open.

The Universal "Four" is entirely automatic. No attention after starting; let it run day in and day out, as long as necessary, and your love for it will increase day by day.

Order direct or through Universal representative in your locality.

UNIVERSAL MOTOR CO.

Oshkosh, Wis., U.S.A.

Breaking a World's Record.

(Continued from page 15)

Of all the other boats which we were to race against, perhaps the dark horse which we feared the most was W. E. T., owned by W. E. Thomas. This boat in appearance is a beauty, and her underbody bears a strong resemblance to some of Seabury's fast boats, so we had good cause to wonder if all the reports of her speed which had reached our ears were true. W. E. T. is a typical round bilge boat, and her design was started nearly a year ago, soon after Flyaway first came into the limelight. She was heralded as a 24-miler when being built and was finished and launched early enough this spring to allow her owner to give her a thorough tuning up. We had watched her trials as best we could, and while it is rather hard to determine from a distance whether a boat is really doing 24 miles an hour or only 18, yet it appeared to us that it was nearer the latter figure. However, as Flyaway III had never done much better than 18 miles an hour in a long-distance race, we realized that there was cause for worry.

The other fast boat entered was Katydid, owned by Captain Van Denberg of the Colonial Yacht Club, designed by Hand and really a miniature Flyaway, but with some 20 less horsepower and some six feet less length. Nineteen miles an hour had been credited to Katydid in her workouts, and without question she should make this speed without much trouble.

We were acquainted with just one amateur who knew just where every one of these lights in the upper Hudson is located, what their characteristics are and how much water there is around them, how much flats have been made in since the last issue of the government charts, where it is safe to take short cuts and much more valuable local information upon which the success of our undertaking largely depended. So, three days before the start of the race, after we were sure that we were to make the attempt at establishing a record, but before any of the other contestants knew we were entered, we wired to Frank P. Huested, Commander of the Albany Power Squadron, and asked him if he would sail with us. Almost at the same time that his telegram of acceptance arrived he showed up also, ready for business.

Before the start we mapped out two distinct courses, all the way from New York to Albany and back again—one for fair weather, taking advantage of all the short cuts, and planning to scoot over all spots with water enough to give us steerage way, and the other for fog. This latter one followed the well-bent channel and passed close to the various aids to navigation which were to be depended upon. In each case we worked out the magnetic compass course, its distance, the length of time to hold each course, the depth of water at various points, etc., etc. We made up our minds that if we did not get back at the expected hour it would not be the fault of the deck watch.

The day of the race dawned very hazy, and at 6 A. M., when the speed boats were sent away, one could hardly see a mile up the river. The cruisers were scheduled to start at 1 P. M., and as the tide tables showed high current at 12:30 P. M., we figured we would have the last of a favorable flood current to help us along. High tide at the upper turning mark occurs ten hours later than at the starting point, which meant that if we could get to Albany before 11 P. M. we would carry the current with us for the 135-mile northern run. This should help our speed to the extent of between one and two miles per hour, which fact was very much appreciated, as it made our chances for a record so much the brighter.

The start was not a very good one on our part, both Satsun, Thomas Farmer's staunch little cruiser, and W. E. T. being over the line before us, but their advantage was not long-lived. Satsun was passed in even less time than it takes to tell of it, and to our great astonishment W. E. T. fell astern so fast that we wondered if she were having trouble so early in the game. Katydid seemed to be coming along at a good clip, and from appearances seemed to be holding W. E. T. if not actually beating her. Fort Washington Point, which is usually passed abeam some fifteen or twenty minutes after the start in races of this kind, was off our starboard beam less than four minutes after the gun. This was the first idea we had of the speed we were really traveling. Everything astern of us was almost out of sight, and all appeared to be on even terms as best we could see. What was the matter with W. E. T.? the 24-miler every one asked of the others? The answers differed. At 1:10 we had passed Spuyten Duyvil, and as we timed ourselves over the Seabury measured mile we were greatly surprised to find that we were doing better than 23 miles an hour.

Yonkers, eight miles from the start, was abeam at 1:30, and Rockland Light, 23 1/4 miles away, at 1:57 P. M. Our predetermined chart courses checked up almost to one-eighth of a point to the course shown by Flyaway's compass, which was very gratifying.

One hour and forty-seven minutes after the starting gun we were abreast of West Point, having covered 42 miles. The engine had not given a moment's trouble since the start, and the r.p.m.'s did not vary more than one or two from the average at any time.

Newburgh was hardly seen at 2:47 when we passed abeam, and from here to Poughkeepsie we ran through a rain and hail storm which made it necessary to steer by compass. We could just barely make out the piers of the Poughkeepsie bridge as we passed between them at 3:45 P. M. Up above Kingston, where the river begins to narrow, we followed the channel at times, but for the most part Commander Huested's knowledge of the river was of much greater value than any chart. We would pick up a buoy with the glasses and before we realized it we had passed it and were looking for the next one. The natives on shore were attracted by the hum of the exhaust of that six-cylinder Van Dierck in advance of our approach and gathered in groups to watch our on-coming. What they thought as they saw us fairly fly by we could only surmise, but from the expression on their faces, as best we could see it, and their hearty cheers, led us to believe that our performance must be something out of the ordinary.

The picturesque towns of the upper Hudson Valley were passed in rapid succession, and five hours and thirty minutes after the start the capital came into view. At 6:43 we turned the upper mark off the Albany Yacht Club, 135 miles from the starting point, having made the entire run at the average speed of 23.8 miles per hour. We took the turn at full speed and then threw out the clutch and pulled into the float of the Albany Yacht Club.

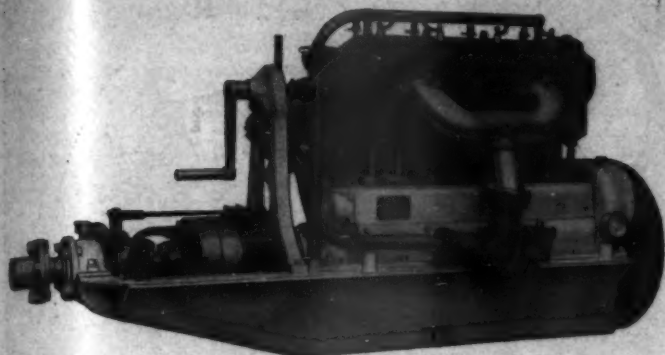
The next two minutes were about the busiest of the race, for in that time we loaded on an even hundred gallons of gasoline in five and ten-gallon cans, assisted by many members of the Albany Yacht Club and by "Johnny" Sohne with his megaphone. At 6:45 the clutch was again thrown in and Flyaway III headed south to complete the record which was already one-half established.

Darkness fell upon us near Coxsackie, and the fun began. In the cruiser of only ordinary speed she seems to speed up after dark, and this increase was even more pronounced in Flyaway. If we averaged a 23-mile speed going up, we surely must be coming down nearer 30, all of us thought, but, of course, this speeding up at night is merely imagination, as the actual speed figures will show.

We now depended upon picking up the buoys and lights by compass, and this kept two of us on the jump every minute. Besides, we must keep an eye out for drift, for a good square blow would have gone through the planking as though it was so much tissue paper. The lights are very poor, in general being nothing more than post lanterns, and visible only a very short distance, but when they did come into view they were exactly where we expected to find them, and while we half lost confidence once or twice, yet as the night went on and the compass proved correct we wished we had even greater speed under us. Once a big black spar loomed up directly ahead of us, not over fifty feet off, and it was only by throwing all our weight on the steering wheel and putting Flyaway "hard to port" that we were able to just slide by it—27 ft. it showed us that we were directly on our course, exactly where we should be.

South of Poughkeepsie, the river lights are practically nil, and as the night was cloudy, with no moon, we could hardly make out our bow from the helmsman's position in the cockpit, yet not for a moment did we slacken speed. Fifteen miles below the city lights of Newburgh gave us our course, and the next problem was to find the opening to the Highlands. We gave Bannerman's Island a wide berth for safety's sake, and down through the Highlands we scooted, helped along by a 3-knot ebb current. We couldn't even make out the outline of Storm King against the sky, it was so dark, and our speed of 25 miles seemed more like 50. It was absolutely quiet, except for the continuous creak of our bow wave and the echo of our exhaust against the hills on each side of us. West Point Light opened up around Constitution Island only a few seconds before we were abreast of it. Cow Hook and Iona Island were safely passed, and the red and white lights of Stony Point were abeam at exactly midnight.

From now on things were easy—three more straight courses would put us close to the finish line if we could safely dodge the floating drift of the lower Hudson and no engine trouble developed. We dodged it, and no engine trouble did develop, and over the finish line off the New York Motor Boat Club we shot at 1:34 A. M.—twelve hours and thirty-four minutes after the starting gun—a record for the course which may stand for many a year.



A Remarkable Motor

This four-cylinder engine of 4½-inch bore and 6-inch stroke weighs 650 pounds and measures 24 inches in length over the cylinders. There is nothing unusual about that.

The remarkable fact is that it is rated at 75 h.p. instead of 40 h.p., which is usual for an engine of this size.

Furthermore, it is guaranteed to develop this power continuously in service.

And yet this is not in any way a purely racing motor, but designed for every-day use in runabouts and speed boats, where light weight, high speed and absolute reliability are required.

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Marine Motors

embody new ideas which have never before been applied to marine engine design.

Three EXCLUSIVE STURTEVANT FEATURES have solved the problem of the high-speed marine motor.

TWIN VALVES, HIGH PRESSURE LUBRICATION and RECIPROCATING PARTS weighing ONE-HALF those employed in any other motor of the same size.

Send for Bulletin No. 216 describing these Sturtevant features in detail.

Built in sizes from 75 to 300 H. P.

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Two 75 H.P. Sturtevant Motors Installed in the Record-Breaking U. S. Navy Sea Sled.



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Gas for boat lighting as provided by Prest-O-Lite in portable cylinders is the acme of efficiency, economy and reliability.

It can be used on any sized boat, with ideal convenience, and costs less to buy and use than any other system of brilliant lighting.

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Prest-O-Lite installation is very simple. Any average mechanic can do the work in a few hours.

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Prest-O-Lite has been proven by years of satisfactory service to be the most convenient, dependable and economical light for all kinds of boats.

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It is in use on the finest boats for searchlight, port and starboard lights and cabin fixtures.

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Prime it with acetylene. The Prest-O-Primer uses acetylene for this purpose from the same Prest-O-Lite that you use for lighting.

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24-foot Standard Sea Sled running at 35 miles per hour

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Bulletin No. 18, by Mr. Hickman, just published, gives information that is not available elsewhere.

Would it surprise you to learn that not only has the Sea Sled every other advantage over the older type of boat, but that it is already more efficient?

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ROWBOAT MOTOR

FERRO

DON'T GO RO
FERROWINGBack Before
the Storm

The wind is rising, the clouds roll up big and black, and off behind you there's the white sheet of rain pelting along the water. But what exhilaration, what a thrill to skim swiftly along in front of the storm, secure in the knowledge that you'll reach the boathouse safe and dry!

For the FERRO has proved its trusty reliability under all conditions and has won the title, "the motor that takes you there and brings you back."

The FERRO opens up a new world to thousands of lovers of the water—for recreation, hunting, fishing, camping and

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with Bosch Reversible Waterproof Magneto.
\$65 with waterproof battery ignition.

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Bosch High Tension Magneto—reversible and waterproof. Genuine Float-Feed Carburetor—not a mixing valve. Scientifically Constructed Muffler—quiet, no lost power.

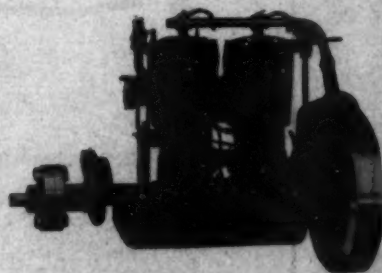
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For Bigger Boats

FERRO Two-Cycle Marine Engines need no introduction. Their performance has won for them an international reputation for being so constructed as to give the best of service for the longest time with the fewest repairs. Folder covering this line on request. Prices have been greatly reduced.

VAN BLERCK MOTOR CO.

MANUFACTURERS OF

MEMBER
NATIONAL ASSOCIATION
OF
ENGINE AND BOAT MANUFACTURERS



Cable address:
"VANBLERCK" Monroe, Mich.
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LIEBOWITZ'S 5TH EDITION)

HIGH DUTY MOTORS FOR TRACTORS, GENERATING SETS,
FIRE ENGINE AND AUTO TRUCKS, HARVESTING MACHINERY ETC.

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Export Office Temporarily in Charge
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EXPORT OFFICE
80 CORTLANDT STREET
ROOMS 1202-1204

NEW YORK CITY.
July 8th. '15

Motor Boating,
119 West 40th.
New York City.

JUL -9 1915

Gentlemen:-

An interesting little occurrence happened to us last week that has a direct bearing on the merit of "Motor Boating" as an advertising medium. Last Thursday we received a cablegram, the gist of which was as follows:-

"if you have six cylinder 100 H.P. or duplicate advertised on page 48 January issue "Motor Boating" cable best price and delivery."

The original engine advertised in your classified columns in that issue was sold in March, but we have a duplicate on hand here in New York, so we cabled him accordingly and this morning we received a reply ordering motor to be shipped immediately to Petrograd, Russia via Archangel.

I have always considered "Motor Boating" a good advertising medium for the United States and Canada and it is real pleasure to me to know that it can bring results to us from far-a-way Russia as well, even in War time.

Very truly yours,

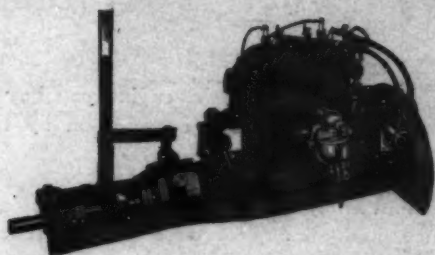
R. W. Wadman
Sales Manager
Van Blerck Motor Company

R. W. Wadman:GH

AGREEMENTS CONTINGENT UPON STRIKES, DEFICIENT TRANSPORTATION AND OTHER CAUSES BEYOND OUR CONTROL. STENOGRAPHIC AND CLERICAL ERRORS SUBJECT TO CORRECTION.

EAGLE ENGINES

This is the Power Plant that has created a new era for the small Speed Boat



MODEL 2-0 12 H.P. Unit Power Plant, consisting of Engine equipped as shown above, with Paragon reverse gear mounted on sub-base, Splittorf High Tension magneto and special cylinder head for dual ignition. Also double vibrating coil, batteries, switch, high tension and low tension cable with terminals. Hyde manganese bronze 14 x 22 x 3 or 14 x 24 x 3 propeller for high speed, 1 1/4 in. x 6 ft. bronze shaft and stuffing box complete, ready to install, \$280.00.

Dynamometer tests show that this engine develops:

13 H.P. at 700 R.P.M.	16.25 H.P. at 900 R.P.M.
14.3 " " 750	16.75 " " 1000
15.5 " " 800	17.2 " " 1100
15.8 " " 850	17.4 " " 1200

17.5 H.P. at 1300 R.P.M., maximum power

Wonderful for its horse power development.
Wonderful for its high grade construction.

Wonderful for its weight.
Most wonderful for its price.

Stop and consider its value and performance, the Model 2-0 EAGLE Engine is the product of the best equipped factory in the world, being made by an organization with more financial responsibility than any other engaged in this line of manufacture, every part of this wonderful motor conforms to our engineer's exclusive formulas. For its bore and stroke we guarantee to develop more horse power than any other two- or four-cycle engine made.

The EAGLE line of Engines consists of 19 models in various sizes and styles—a motor for every requirement and at popular prices.

Send a request for our 1915 catalog and see how promptly you receive it. Orders are handled just as promptly.

You will appreciate the advantage of dealing with a big, live concern, when you realize that we carry a large stock of engines, so that we can supply you with engines when you want them. No annoying delays in filling your orders.

YOU CANNOT AFFORD TO BUY A TWO-CYCLE ENGINE WITHOUT INVESTIGATING WHAT WE HAVE TO OFFER!

THE STANDARD CO.,

Torrington, Conn.

Distributors for EAGLE Engines

San Francisco, Cal.....The Standard Co., 1038 Geary Street
Los Angeles, Cal.....Marine Equipment Co., 729 So. Los Angeles Street
Seattle, Wash.....The Standard Co., 1625 Broadway
Chicago, Ill.....H. R. Chadwick & Co., 1205 So. Michigan Avenue
Galveston, Texas.....Barden Elec. & Mach. Co., 712 Tremont Street
New Orleans, La.....Stauffer, Eshleman & Co., Ltd., 511 Canal Street
New York City.....Bruna, Kimball & Co., 115 Liberty Street
Cleveland, Ohio.....Motor, Boat & Supply Co., 1411 W. 9th Street

Houston, Texas.....Barden Elec. & Mach. Co., 111 Main Street
Baltimore, Md.....Unger & Mahon, Inc., Pratt & Gay Streets
Philadelphia, Pa.....W. E. Gochenaur, 631 Arch Street
Port Elgin, N. B.....C. B. Copp, Copp Block
Montreal, Canada.....Shea Sales Co., 296 St. James Street
Manteo, N. C.....Creed & Jones
Pensacola, Florida.....W. A. Ray Hardware Co.

WINTON

You are entitled to two kinds of service with the engine you buy—satisfactory operation of the engine itself, and cooperation by the maker after installation.

You could go into the market and safely buy any engine—if all engines equelled Winton performance, and all makers were as keen to co-operate with owners as we are.

But, the average maker thinks, after he has built the best engine he knows how to build, that his responsibility has ended. Then, the responsibility is upon you.

Greater security is yours when you buy a Winton. The purchaser runs no risk of inferior quality, for the engine industry does not possess a more capable or progressive designer than Alexander Winton, nor a factory having greater facilities for the production of high-class work.

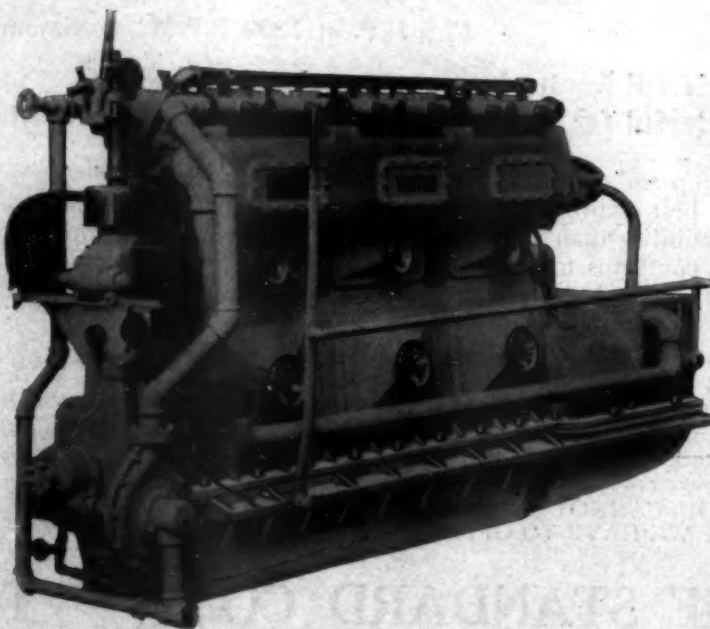
As to serving the purchaser, the Winton Company conducts its business on the basis of responsibility to the owners of its engines for all time and jealously guards its well-earned reputation for doing so.

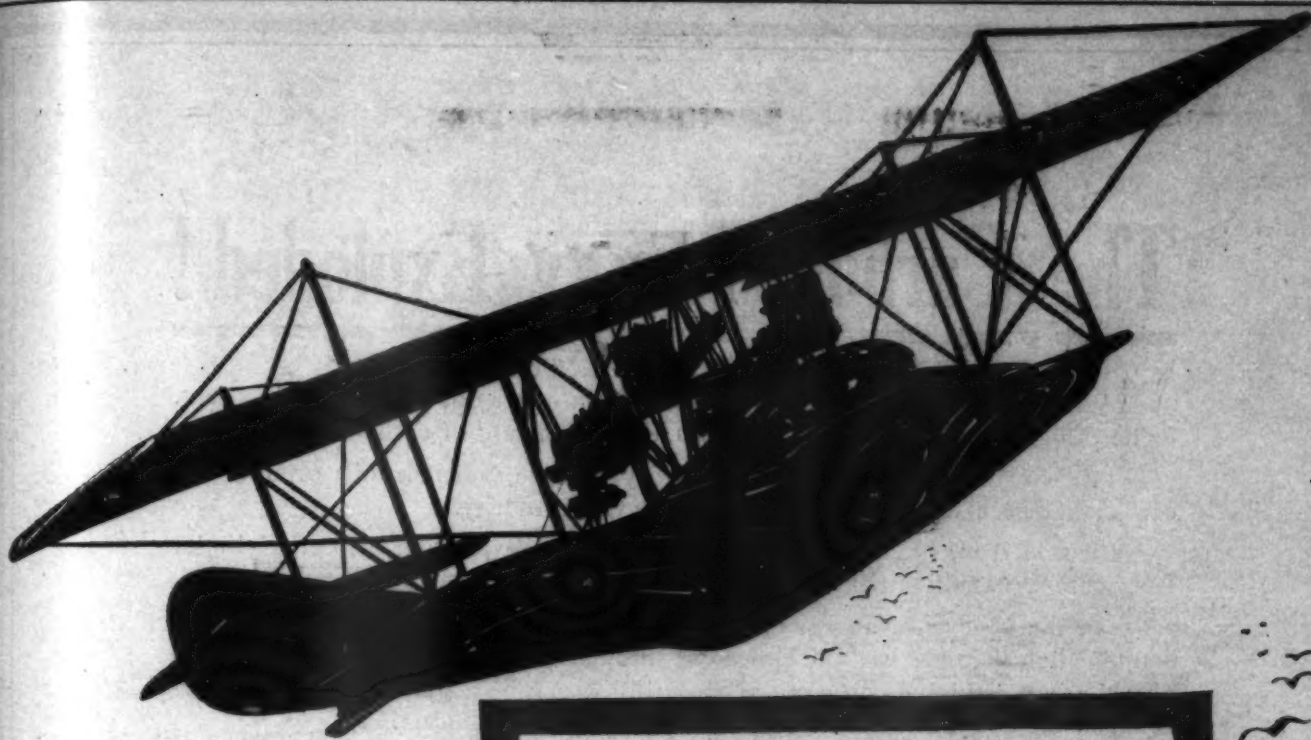
Whether you purchase the smallest or largest engine we manufacture, the same high quality of design, material and workmanship and the same degree of responsibility for its performance go with it.

WINTON ENGINE WORKS

2116 West 106th St.
CLEVELAND, OHIO

Service





For Your Aeroplane, Automobile or Motor Boat

NO matter under what conditions motors work, their needs are pretty much the same. Up in the air, on the road or on the water, in order to have a smooth-running motor that delivers its maximum power, you need a high quality lubricant.

For safety, pleasure and economy, you need an oil that retains its body under heat. Its point of flash must not be too low, else it will be destroyed as a lubricant before it passes the piston rings and reaches the heat of the combustion chamber. It must not have too high a flash, else, when once in the combustion chamber the temperature will be too low to consume it, and it will char, causing carbon deposits on piston and cylinder heads and gumming of the piston rings and valves and valve seats. It should have a low cold test, so that it will flow freely and lubricate fully in zero weather. And lastly it should not be prohibitive in price.

Texaco Motor Oil fills the bill.

You can get it at good garages everywhere in 1 and 5 gallon cans.

Get a free copy of *Motor Miles*; well worth reading by every motorist.

THE TEXAS COMPANY
New York City

TEXACO MOTOR OIL

The Carbon Theory Exploded!

When a dealer tells you there is no carbon in his oil, he is either ignorant, or he thinks you are. All oils contain a certain amount of carbon.

The threadbare and overworked theory that the Northern oils produce less carbon has been upset by United States Naval Authority.

Lieut. Bryan, of the United States Navy, an expert on Motor Cylinder Lubrication, has this to say on the carbon question:

"In the absence of any gummy deposit of this kind to cement the free carbon together, the latter will be **blown out through the exhaust**. The oil that will give the best results, then, is not necessarily the one that will **form** the least carbon, but the one that **will form the least carbon in the cylinders**.

"Oils made from the **Southern-asphalt-base crudes** have shown themselves to be much **better adapted** to motor cylinders, as far as their carbon-forming proclivities are concerned, than are the paraffine-base Pennsylvania oils. The carbon formed from the latter is, as a rule, extremely hard, and clings to the metal surfaces, while that from the former (Southern Oils) is soft, and can easily be wiped off any surface that it is deposited on. This would be expected from a consideration of the hydro-carbons composing the oil, and it has also been demonstrated in practice.

"The explanation lies in the fact that the paraffine-base oils are generally composed of the paraffine series of hydro-carbons, while the asphalt-base oils are mainly composed of the ethylene and naphthalene series. One of the characteristics of the latter (Southern Oils) two series, as compared with the paraffine series, is their tendency to distill without decomposition. Consequently, **no gum** will be formed on the cylinder walls, and the carbon liberated will be mostly **discharged with the exhaust gases**."

Lieut. Bryan's address to the Society of Naval Engineers is interesting and instructive. We will be glad to mail a copy on request.

SUPREME AUTO OIL

is manufactured from selected high grade **Southern-asphalt-base Crude Oil**. You may eliminate much of the carbon troubles by using it exclusively.

Look for the Dealers Displaying
the Sign of the Orange Disc

Gulf Refining Company

The Largest Independent Refining Company in the World

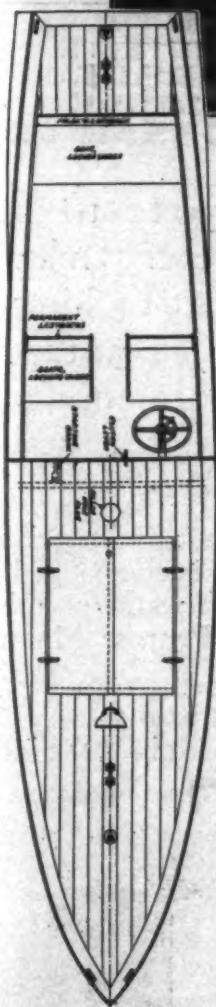
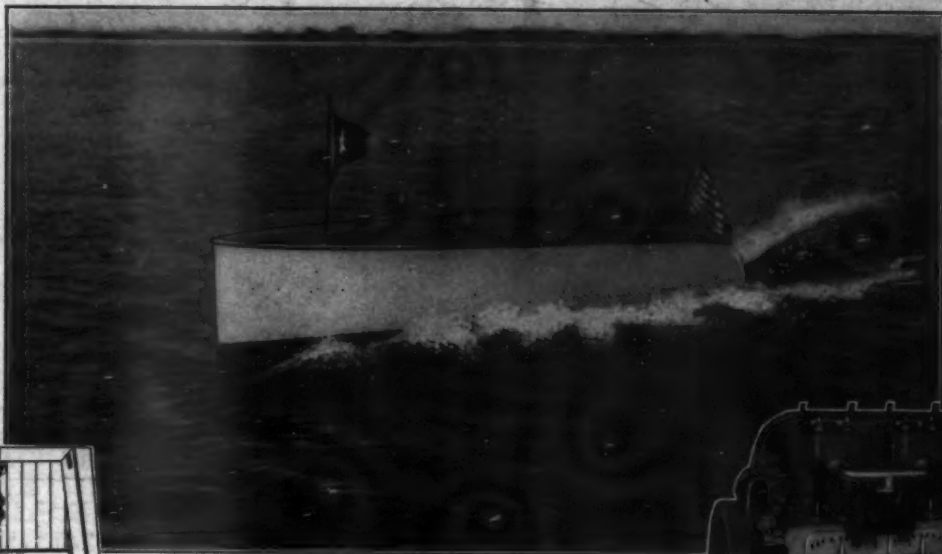
Frick Annex

PITTSBURGH, PA.



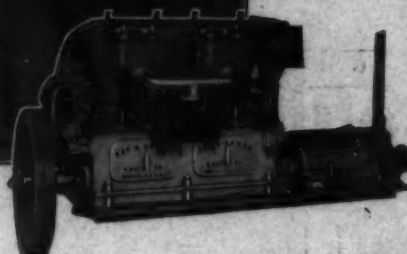
READY FOR SHIPMENT

Complete as Described, only \$1,450⁰⁰



Junior Runabout

24 Feet x 5 Feet



16 Real Miles an Hour Guaranteed!

Moderate in Price and Complete in Appointment

Carries Eight

Modern raised-sheer design; dry and seaworthy; copper and brass fastenings, full mahogany finish; divided front seats; latest Wilcox and Crittenden auto steering wheel with engine controls; electric lights; electric signal; rear starter; fuel indicator; carburetor regulation on bulkhead; linoleum on floor; fully upholstered; Maxim silencer; Bosch magneto; reverse gear; four-cylinder, four-cycle Fay & Bowen engine, 3½x5; bronze rudder, bronze propeller, shaft and bearings; flags and staffs, mooring lines and boat-hook, full set engine tools, etc.

Send for Catalogue

Fay & Bowen Engine Co.

104 Lake Street

Geneva, N. Y., U. S. A.



FAY & BOWEN ENGINES



7 Reasons Why

Penrose Motor

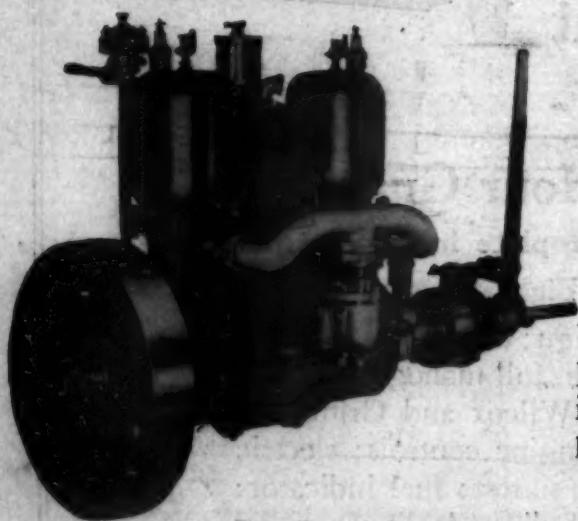


**NO
CRANKCASE
COMPRESSION**

therefore

MORE

**POWERFUL
ECONOMICAL
EFFICIENT
DURABLE
RELIABLE
ACCESSIBLE**



EVERY man who expects to buy a marine motor, and every man who sells marine motors, owes it to himself to investigate the peculiar advantages of Penrose design. The performance of the Penrose is different because the design is different.

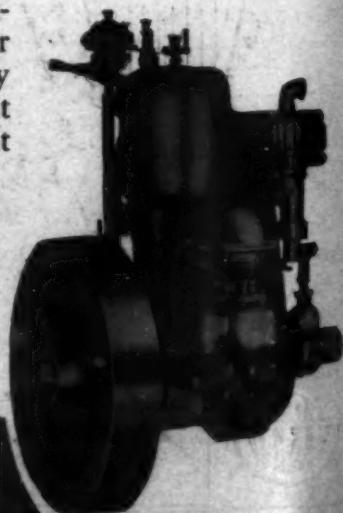
It is reasonable to suppose that the ultimate limit of efficiency in marine motor engineering has not been reached in the present conventional types. Upon careful and unprejudiced investigation, you will find that the Penrose Motor is an improvement of real merit.

We stand ready to prove every one of our claims. In fact, we are more than ready—we challenge anyone to prove otherwise. We have eliminated crankcase compression and retained the ideal two-cycle feature of a power impulse every revolution.

Extreme economy of fuel is gained and the usual waste through the exhaust port prevented. Full expansion of gas is secured, giving full power from every drop of fuel. Working parts are more easily and quickly accessible than in any other motor. All moving parts are enclosed, but may be gotten at quickly for adjustment, repair or replacement without disturbing other parts.

Lubrication is more positive and reliable than in most marine motors, due to the exclusive features of Penrose design. This perfection of lubrication makes wear practically a negligible item and keeps the motor running like new after any amount of severe heavy duty service.

Write to-day for a full description of the wonderful new Penrose Motor. Don't wait until you are ready to buy a new motor. Write to-day.



PENROSE MOTOR, Inc.
1319 Pennsylvania Bldg. Philadelphia, Pa.

When writing to advertisers please mention MOTOR BOATING, the National Magazine of Motor Boating.



FOR GREATER SAFETY AT SEA

HOLMES

LIFE BOAT MOTORS

"The Motor the Life Savers Use"

If every marine motor was actually as reliable as the Holmes Motor has proved to be, we would still have the exclusive advantage of accessibility, economy and quietness to a higher degree than this combination now exists in other motors. But the Holmes gives you these very desirable features, *plus* such absolute reliability that no other power plant can be considered in the same class with it for Life Saving work. That is why it is used in hundreds of fine pleasure and commercial boats, as well as over 80 Life Boats used in the U. S. and Canadian Government Service.

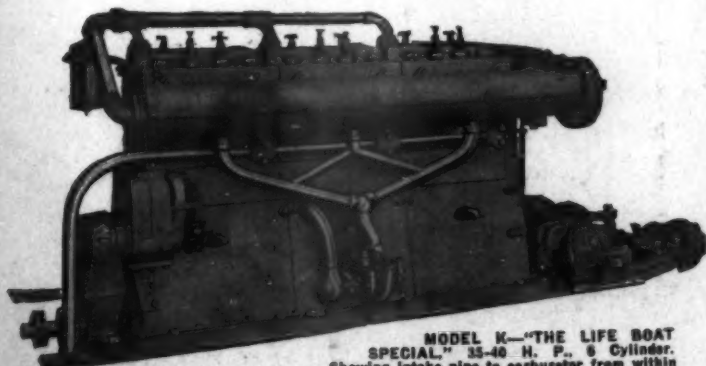
25 H. P., 4 Cyl.

50 H. P., 4 Cyl.

35-40 H. P., 6 Cyl.

75 H. P., 6 Cyl.

100 H. P., 8 Cyl.



MODEL K—"THE LIFE BOAT SPECIAL," 35-40 H. P., 6 Cylinder.

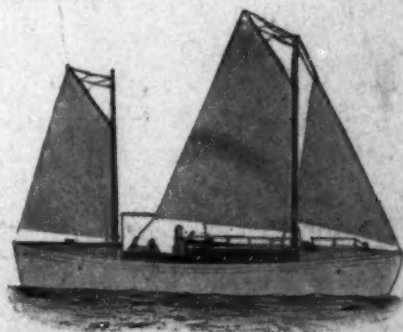
Showing intake pipe to carburetor from within hull base. Air is drawn from both ends of engine through the base into this pipe, sweeping the base of all smoke and gases. Should backfire occur it would be through this pipe and could do no harm.

LIFE BOAT CRUISERS

Non-Sinkable — Self-Righting — Self-Bailing

These are real motor life boats, with all the safety and reliability possible to produce by special design. The motor is mounted in a separate fireproof compartment at the stern and the hulls are positively non-sinkable, self-righting and self-bailing. Launched upside down with block and fall for purposes of demonstration, the boat rights itself instantly when it settles in the water. We are building many of these boats for work and pleasure use, as the general design permits unusually large accommodations for cargo or living quarters. In fact, it is more roomy than most boats of ordinary design.

Let us submit photographs, sketches, and estimates if you are interested.



Holmes McLellan Life Boat Cruiser, built for use at Isle of Pines, West Indies.

WRITE FOR CATALOGS OF HOLMES MOTORS AND CRUISERS

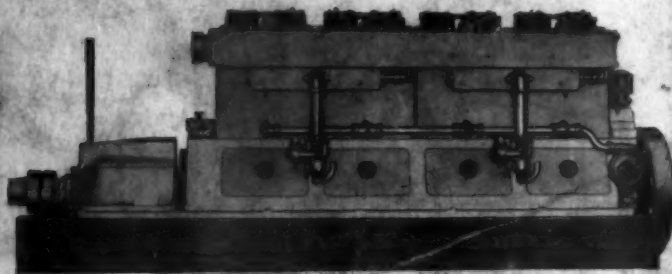
THE HOLMES MOTOR BOAT CO., Inc., 50 State Street, Boston, Mass.

Works at West Mystic, Conn.

Sterling

THE ENGINE of REFINEMENT
For the
finest boats that float

The Eight Cylinder Sterlings



Model D, 200 H.P. heavy duty engine.

*We Were the First
to Build Eight
Cylinder Motors
for Marine Work*

We Have Had the Experience and Know How

Heavy Duty Type. Slow Speed, Model D

Bore $8\frac{1}{2}$ ". Stroke 10". 200 H.P. at 500 R.P.M. Weight 6,500 lbs.
Price \$5,500. An Engine of Great Efficiency. Built for Hard Service.

Speed and Medium Speed Motors for Heavy Duty Service. Model F.

Model F—Bore $6\frac{3}{4}$ ". Stroke 9". 300 H.P. at 1,000 R.P.M. Weight 5,000 to 5,600 lbs., according to requirements. Price on application. An Engine of Great Refinement for Express Cruisers, Racing Yachts and Coast Defence Craft. Built on Order from Stock Parts.

Model F—Bore $5\frac{1}{2}$ ". Stroke $6\frac{3}{4}$ ". 140 H.P. at 1,000 R.P.M. 116 H.P. at 800 R.P.M. Weight 1,800 lbs. Price on application. A Refined Engine for Large Runabouts and Express Cruisers.

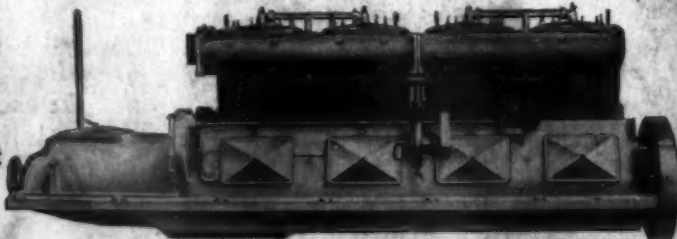
High Speed Racing, Model R

Model R—Bore $5\frac{1}{2}$ ". Stroke $6\frac{3}{4}$ ". 225 H.P. at 1,500 R.P.M. 250 H.P. at 1,700 R.P.M. Weight 1,400 lbs. Price \$3,000. This Is the Famous Sterling Racing Engine.

Let us send you our folders covering these motors or any of our other models. We have the Correct Engine for Every Type and Size of Boat.

**Sterling Engine
Company**

1254 Niagara Street
BUFFALO
N Y.



Sterling, Model F, 300 H.P., 8-cylinder, $6\frac{3}{4}$ inch stroke, heavy duty, speed engine. 300 H.P. at 1,000 R.P.M. Weight 5,000 lbs.

